

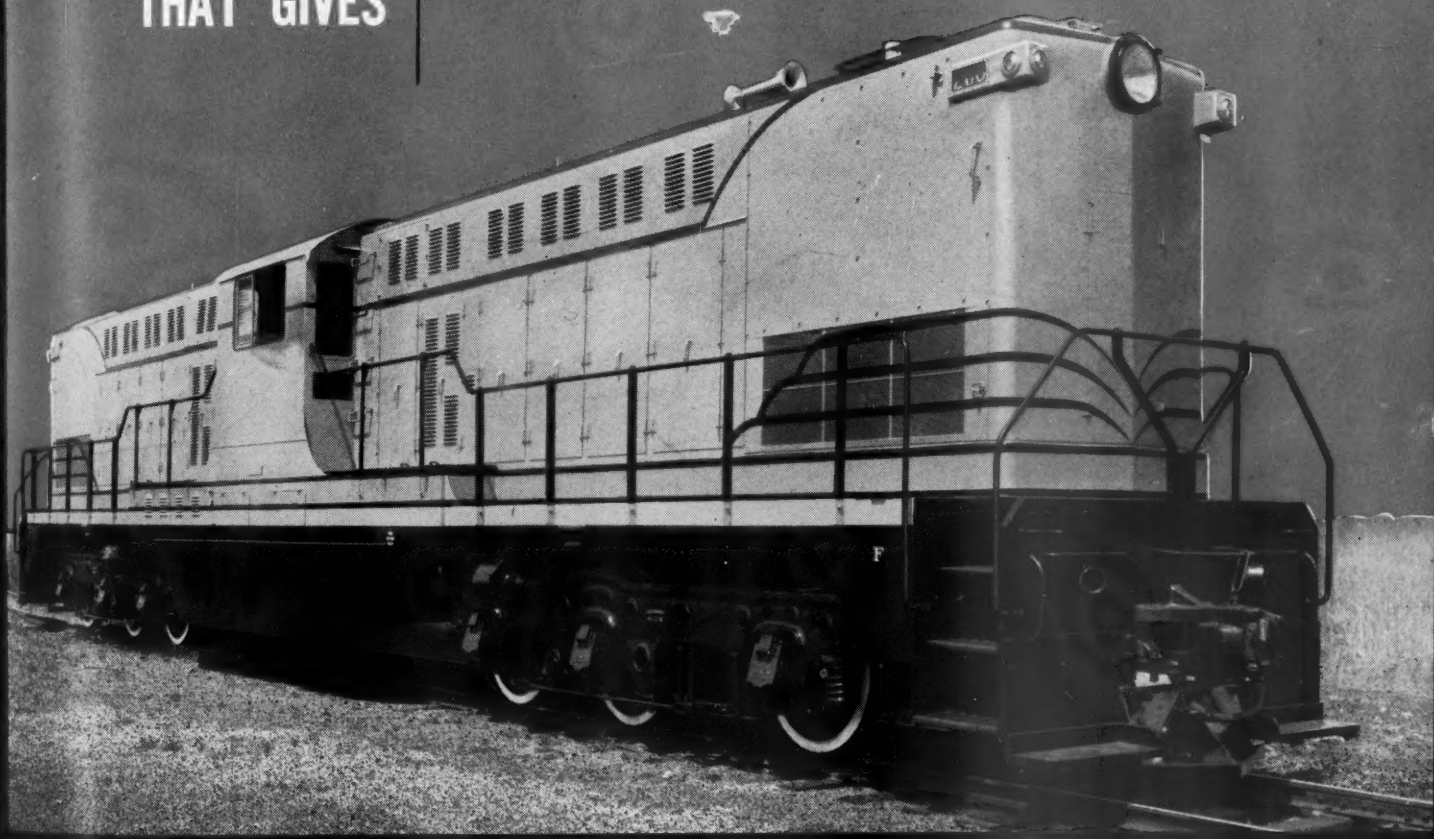
RAILWAY AGE

DEC 15 1948

DECEMBER 11, 1948

A TRANSFER
LOCOMOTIVE
THAT GIVES

“more power to you”



With the Baldwin diesel-electric Transfer Locomotive you get the full advantage of a single-unit powered by two 1000-hp. supercharged diesel engines, acting through six heavy-duty traction motors, one on each axle. The full weight of the locomotive is available for adhesion.

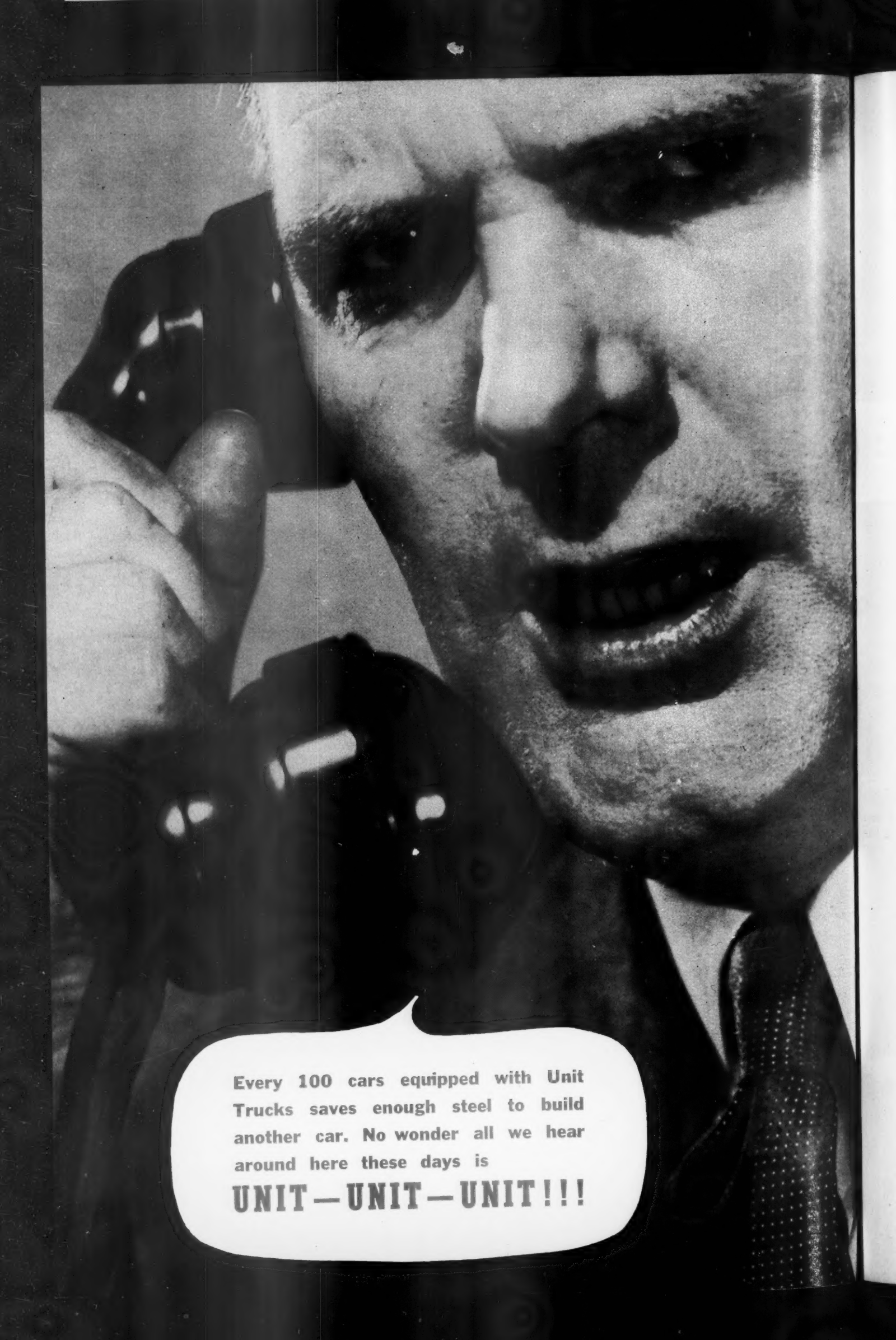
Ask your nearest Baldwin representative to tell you how this locomotive fits into your operating picture.

BALDWIN PRODUCTS FOR THE RAILROADS: Locomotives of all types; rolled steel wheels and tires; connecting rods; springs; steel forgings and castings; hydraulic metal forming, wheel and bushing presses; plate planers; bending rolls; static and dynamic testing equipment; track scale test cars.



BALDWIN
LOCOMOTIVES

The Baldwin Locomotive Works, Philadelphia 42, Pa., U. S. A.
Offices: Boston, Chicago, Cleveland, Houston, New York,
Philadelphia, Pittsburgh, San Francisco, Seattle, St. Louis,
Washington. In Canada: Canadian Locomotive Co., Ltd.,
Kingston, Ontario.



Every 100 cars equipped with Unit
Trucks saves enough steel to build
another car. No wonder all we hear
around here these days is

UNIT—UNIT—UNIT!!!

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

IN THIS ISSUE

EDITORIALS:

Two Concepts of Management's Job—Trouble-Shooting vs. Trouble-Prevention	45
The Record Speaks	46
Electrification Potentials	47

GENERAL NEWS	68
--------------------	----

CURRENT PUBLICATIONS	96
----------------------------	----

GENERAL ARTICLES:

What Makes High Speed Service Pay?, by F. N. Nye	48
Hearing on Interim Rate Increase Concluded	52
Swiss Machine Makes "Clean Sweep" in Renovating Ballast	55
Investment Companies Show Increasing Interest in Railroad Stocks, by Henry Ansbacher Long	56
Builds 52-Mile Line in 11 Months	60
"Cement Case" Ruling Will Boost Prices of Railway Supplies	63
Railway Buying Continues at High Rate	66

Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn., with Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 105 W. Adams Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1038 Henry Building—San Francisco 4: 300 Montgomery Street, Rooms 805-806—Los Angeles 14: 530 West 6th Street—Dallas 4: 2909 Maple Avenue.

Samuel O. Dunn, Chairman and President. James G. Lyne, Executive Vice-President. S. Wayne Hickey, C. Miles Burpee, H. H. Melville, C. W. Merriken, F. C. Koch, R. E. Thayer, H. E. McCandless, Vice-Presidents. John R. Thompson, Western District Sales Manager. J. S. Crane, Vice-President and Secretary. J. T. DeMott, Treasurer. Ralph E. Westerman, Arthur J. McGinnis, Assistant Treasurers.

C. Miles Burpee, Business Manager. Subscriptions including 52 regular

weekly issues, and special daily editions published from time to time in New York or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, \$6.00; 2 years, \$10.00; other countries not including daily editions in Western Hemisphere 1 year \$10.00; 2 years \$16.00; other countries 1 year \$15.00; 2 years \$25.00. Single copies, 50 cents each, except special issues.

H. E. McCandless, Circulation Manager, 30 Church Street, New York 7

"UNION" C.T.C.

*Saves Time
and Money*
On Branch Lines

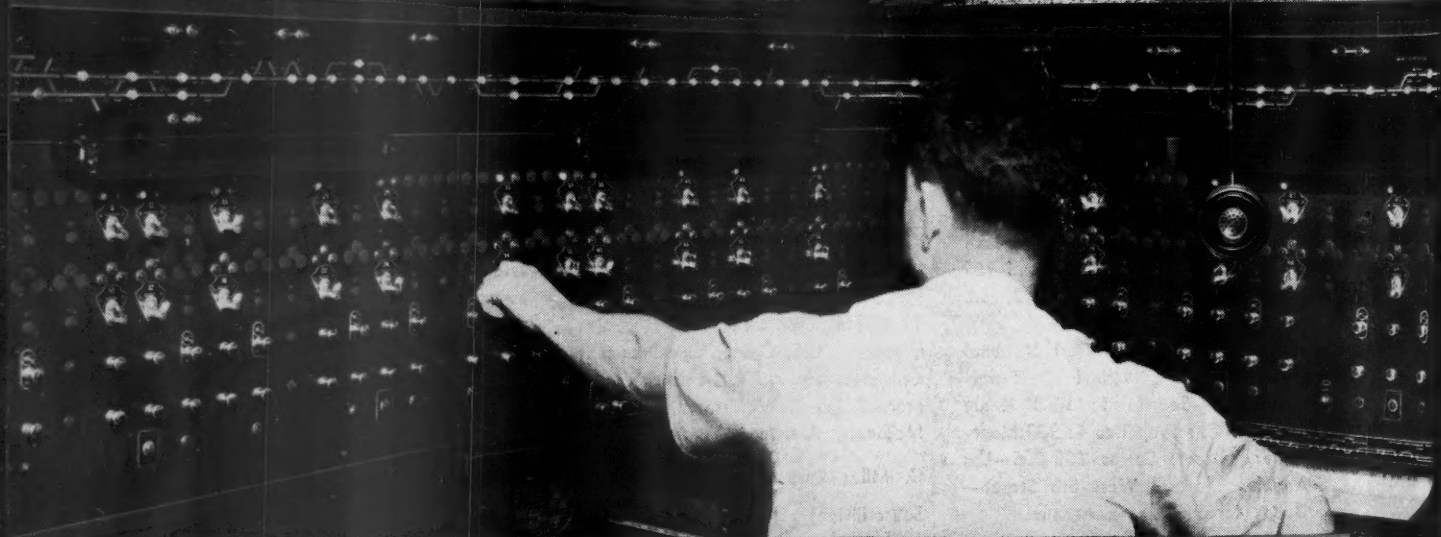
One of the most interesting installations of "Union" C.T.C. is on a branch line of an important coal producing railroad. As there are few scheduled passenger and freight trains, most of the traffic consists of "extras" . . . heavy coal trains enroute to the mainline and solid trains of empties returning to the mines.

With "Union" C.T.C., the dispatcher handles trains as they are ready, plans meets and passes for most efficient operation, and directs all movements by signal indication.

Results—congestion has been eliminated, all traffic is expedited—and "Union" C.T.C. is *saving more than it costs.*



Governed by minute-to-minute progress, dispatcher advanced Extra 2722 east (with 160 empties) ahead of E. B. Manifest before directing trains by signal indication to make passing move.



UNION SWITCH & SIGNAL COMPANY

SWISSVALE

PENNSYLVANIA

NEW YORK

CHICAGO



ST. LOUIS

SAN FRANCISCO

WEEK AT A GLANCE

AN OUNCE OF PREVENTION: Our leading editorial this week suggests that some of the fundamental problems of the railroad industry may be due to too little comprehensive policy-making. Management, in other words, might well become a "trouble-preventer" rather than a "trouble-shooter." Certainly the success of comprehensive long-range planning on some individual roads indicates that it might help the industry as a whole.

MEETING COMPETITION WITH HIGH SPEED FREIGHT: Mechanical, operating, traffic and freight claims officers, as well as top-level executives, will all find much interesting information, and plenty of food for thought, in the paper presented before the American Society of Mechanical Engineers on December 2 by F. N. Nye, assistant to general freight traffic manager of the New York Central System. Mr. Nye's analysis of some of the factors that must be explored before establishment of a high-speed merchandise service, and of the operating problems that are encountered in such services, is so clear, so timely, and of such general interest that we are printing it virtually in full—page 48.

WHAT DO INVESTORS THINK? As *Railway Age* has frequently pointed out in its editorial columns, the mass opinion of investors and security owners concerning the present value and future prospects of railroad securities—particularly those of the equity type—should be a matter of primary concern to railroad executives and financial officers. It should, for that matter, be of equal concern to the traveling and shipping public, and to railroad employees, because investor acceptance or rejection of railroad stocks has a direct bearing on the roads' ability to finance service improvements. One way of determining investor acceptance of railroad equities is to ascertain the extent to which they are owned by professionally-operated investment companies. Their holdings of railroad stocks, analyzed especially for *Railway Age* by Henry Ansbacher Long, recognized independent authority on investment companies, are carefully tabulated on pages 58 and 59. The accompanying text, beginning on page 56, points up the conclusions to be drawn from the tabulation.

MADE IN SWITZERLAND: A short illustrated article on page 55 describes the operation on the Atchison, Topeka & Santa Fe of a new type of ballast cleaner developed in Switzerland, used for some time in other European countries, and now being introduced here by the Matisa Equipment Corporation of Chicago.

MORE COST INCREASES? Of 50 leading manufacturers of railroad supplies who have expressed opinions on the subject, a clear majority see only harmful effects on their own businesses, and hence on the railroads, from the

Supreme Court's "Cement Case" ruling. Generally, these suppliers feel that straight f.o.b. mill pricing would force an increase in the price of railroad supplies, curtail the opportunity of railroads to select among competing producers, and reduce railroad traffic. Their views are analyzed and in some cases quoted on pages 63-65. Their ideas as to the decision's probable adverse effects are borne out by testimony submitted this week to the Senate Trade Practices Committee by Dr. Julius H. Parmelee and Walter J. Kelly of the Association of American Railroads and H. W. Fraser of the Order of Railway Conductors. This testimony is reported in our news columns.

TEN MONTHS' NET: Our news pages summarize the Association of American Railroads' estimates of financial results for October and the first 10 months of 1948. Net income was up from 1947—but the full impact of granted or pending wage increases is not included.

RATE HEARINGS CONCLUDED: Motions asking the Interstate Commerce Commission to investigate the effect of "feather-bed" rules on railroad operating costs, to dismiss the interim-relief motion, and to require submission of evidence showing the extent to which railroads are supplying "adequate" service "at the lowest costs consistent with . . . such service" highlighted the final hearings before the commission's Division 2 on the railroads' Ex Parte 168 freight-rate increase motion. These final hearings, reported in detail in an article starting on page 52, were also marked by cross-examination of railroad witnesses, whose presentations of the need for rate increases have been reported in earlier issues of *Railway Age*.

NEW LINE FOR KAISER: Another article with a definite engineering slant is the illustrated account beginning on page 60 of the construction for the Kaiser Company of a 52-mile line from a connection with the Southern Pacific at Ferrum, Cal., to Kaiser's iron ore mine at Eagle Mountain. The new line, which went into operation only a few weeks ago, is said to be the longest privately owned standard-gage railroad built in this country since 1918. Designed to serve the new Kaiser steel plant at Fontana, Cal., its construction through intensely hot desert country presented some interesting problems—such as the provision of protection against flash floods.

BUYING CONTINUES HIGH: Our regular monthly survey of railroad purchases, at page 66, shows that total buying for the first nine months of 1948 was well over two billion dollars. Excluding fuel, purchases from manufacturers in the same period topped one and one-half billions. Both figures were substantially ahead of those for the corresponding period in 1947.

THE RAILROAD

Baltimore & Ohio Railroad



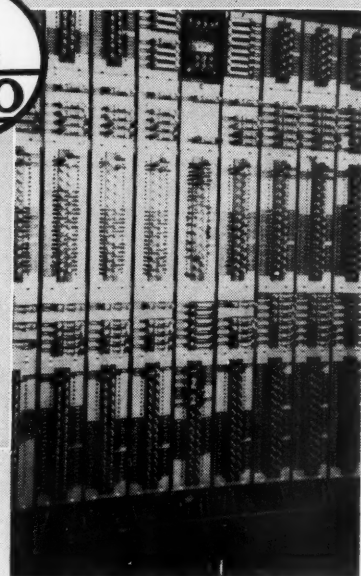
THE SERVICE

Car retarder control circuit

THE LOCATION

New yards at Willard, Ohio

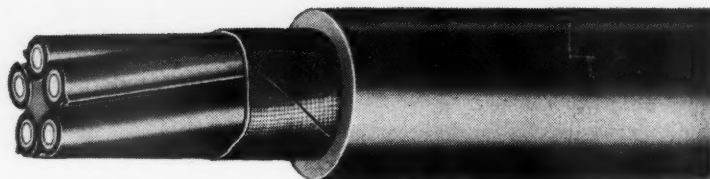
Eastbound Willard, Ohio yard. General view "down the hump." Control tower in background. Okolite-Okoprene cable is buried directly in the ground between the car retarder and the tower. This cable is used also in the more recently completed Westbound yard at Willard.



Terminal board inside control tower showing incoming cable.

THE CABLE

MULTI-CONDUCTOR OKOLITE-OKOPRENE



THE Baltimore & Ohio Railroad is assured of these features of Okolite-Okoprene Cable which contribute to its long life and freedom from failure.

Moisture, ozone and heat resistance — The insulation has proved Okolite's stable electrical characteristics in cable operation at voltages as high as 38 KV.

To the toughness and non-flammability of its covering sheath of Okoprene, an Okonite-developed neoprene compound, is added its *imperviousness to sunlight, weather, chemicals and fumes*. And it does not develop static discharge at voltages up to 5 KV between phases.

An installation like this is only one of many uses for Okonite wires and cables by American railroads. Write for detailed information on the specific service to which you put wires and cables. The Okonite Company, Passaic, N. J.

6886

OKONITE



insulated wires and cables

THE BEST CABLE IS YOUR BEST POLICY

RAILWAY AGE

EDITORS...
Samuel O. Dunn and James G. Lyne

MANAGING EDITOR...
C. B. Tavenner

WESTERN EDITOR...
Neal D. Howard

NEWS EDITOR...
Gardner C. Hudson

WASHINGTON OFFICE...
Walter J. Taft

TRANSPORTATION DEPARTMENT...
William H. Schmidt, Jr.
Robert G. Lewis

MECHANICAL DEPARTMENT...

C. B. Peck
E. L. Woodward
H. C. Wilcox
C. L. Combes
G. J. Weihofen

ENGINEERING DEPARTMENT...

M. H. Dick
Walter L. Turner, Jr.
Henry E. Michael
Norris V. Engman

PURCHASES & STORES DEPARTMENT...

John W. Milliken

EQUIPMENT & FINANCIAL NEWS...

Fred C. Miles

SIGNALING AND COMMUNICATIONS DEPARTMENT...

John H. Dunn
Maurice Peacock

ELECTRICAL DEPARTMENT...

Alfred G. Oehler

WESTERN NEWS DEPARTMENT...

George R. Johnson

ASSOCIATE EDITOR...

Charles Layng

LIBRARIAN...

Edith C. Stone

EDITORIAL ASSISTANT...

Elaine C. Farrar

TWO CONCEPTS OF MANAGEMENT'S JOB— TROUBLE-SHOOTING VS. TROUBLE-PREVENTION

Several important utility corporations are seeking rate increases—although they regularly, year after year, earn more on their investment than the railroads do even in the most prosperous times. These companies, in their advertising and publicity, are relating their applications for higher rates to their desire to raise funds by equity financing for large-scale capital improvements. The improvements, in which the public naturally has a lively interest, are proffered as *quid pro quo* in return for higher rates, which are expected to come *before* the improvements are undertaken. The railroads usually reverse the process—first providing the improvements, somehow, to the extent that is possible out of earnings or by borrowing—and appealing later to popular gratitude to reimburse them for the outlays already incurred. Which of these policies is the wiser?

The preceding question looks like a rhetorical device for implying criticism of the railroads, but it is not so intended. The railroads have never practiced equity-financing as the utilities have, and it would take a major effort over a term of years to establish themselves on that basis and to gain public understanding and acceptance of the change. While this process was going on, it would not be to the advantage of either the public or the railroads if all capital improvements were suspended. At the

same time, should there not be a more definite program than now exists for establishing in the public understanding the relationship which unavoidably exists between the adequacy of railroad service and the adequacy of the "wages" paid to railroad investors?

Finding the Answers

Most railroad spokesmen are unwilling to admit the existence of deficiencies in service which inevitably result from deterioration in investors' confidence in the industry. Reluctance to admit shortcomings is understandable—especially since such admission might be utilized as ammunition by government-ownership advocates. But how can the public be made eager to pay the full cost of good service if it is continually being persuaded that the railroads have never failed to serve it very well indeed, in spite of earnings at only half the rate which other industries have found necessary to attract a plentiful supply of new capital?

These are hard questions, but finding answers to them is a primary responsibility of management. They are much harder questions for the railroads than for other industries, because no one railroad acting alone can answer them—and it is difficult for all railroads to see alike on such questions be-

cause of their vastly differing circumstances. Many of the criticisms of the railroad industry, and especially of the Association of American Railroads, by Chairman Robert R. Young of the Chesapeake & Ohio, have their origin in this inherent situation, rather than in an over-developed propensity for sin on the part of A.A.R. member roads.

For example, in the December issue of the publication "Railway Progress" Mr. Young has an article in which he criticizes the railroads for the weight of car-wheels, and seems to attribute to this cause (1) loss of peace of mind by railroad employees' wives, (2) loss of "progressive suppliers' respect," and (3) loss of "the investor's shirt and the passenger's eye-teeth." Further on in the article, these and kindred misfortunes are also blamed upon the slowness of the Interstate Commerce Commission in granting rate increases—which, in turn, is laid at the door of inadequate public relations effort by the railroads.

A Basic Factor

In the same issue of the F.R.P. magazine, the C. & O.'s public relations director, Thomas J. Deegan, excoriates the inadequacy of the railroads' public relations efforts, citing specific instances of alleged shortcomings which make interesting though controversial reading. He reaches the conclusion that "railroad public relations men are looking backward, ever backward." There are other articles in the issue which are both instructive and irritating—but the purpose here is not to present a review of the contents of that publication. The quest is, rather, to locate, if possible, what clues there may be to a common origin in such apparently unrelated difficulties as those which Mr. Young and his disciples criticize and those which all railroad men recognize—i.e., perennially inadequate earnings, increasingly subsidized competition, constantly more restrictive regulation, incessant demands from the brothers.

Is there any one factor which, with any degree of plausibility, may be suspected as basic in all these difficulties—not a "least common denominator," but a "most common trouble-maker"? Such a factor may be tentatively suggested, and here it is: *The limited amount of comprehensive policy-making by the railroads*—the propensity to attend to the immediate and piecemeal things and to let the "long-run" and the "whole picture" take care of themselves. If this fault can fairly be laid to railway managements, then they have plenty of good company—because a prominent educator has said of Americans generally that, as a people, we "spend so much time on things that are urgent that we have none left to spend on those that are important."

Is it not, however, a fact that those railroads

which have in recent years been most successful have been those which have developed rather comprehensive and long-range programs of service and plant improvements, recasting of finances, industrial development, customer and public relations? If the process of taking careful thought produces favorable results when applied by individual companies, might it not bring even more favorable results if applied more intensively by these same companies? If extended to other companies and to the industry as a whole, might it not accomplish a very great deal indeed? If the best financial planning, the best public and employee relations work, the best operating and technological policies to be found anywhere in the railroad industry were combined, and then generalized throughout the industry, revolution would surely be much too weak a word to apply to the probable result.

Most of the fundamental problems cannot be solved by one railroad acting alone, however brilliantly. For example, in the field of employee relations, the chief executive of a road with excellent performance in this area has pointed out: "Union policy toward our railroad is determined largely, not by our friendly relations with our own employees, but by the union attitude toward the railroad industry as a whole—which means that a few hard-boiled and reactionary managements can largely prevent managements which enjoy good relations with their own employees from deriving any real benefit from these friendly relations."

There are few serious difficulties confronting the railroads today which were not anticipated long in advance by foresighted men in and around the railroad industry; and which could not have been averted if the railroads had been organized as effectively to put foresight to work as they are to deal promptly with their day-to-day problems. This situation was recognized, in part, by the formation of the Railroad Committee for the Study of Transportation—but only in part, because continuing problems can be solved only by continuing study—by officers of sufficient authority to put their findings into actual use.

THE RECORD SPEAKS

While steam power is destined to disappear entirely from some railroads, and will be displaced to varying degrees on others, there will be a great many steam locomotives in use for years to come—not only because Diesel replacement takes time but also because there are many jobs that can be performed most economically by steam. By coupling these conclusions together with the facts that steam locomotives still perform the majority of

railroad work and have an annual maintenance cost exceeding \$500 million, it is evident that there are both present and future possibilities for reducing mechanical department costs by improving steam locomotive availability and by reducing maintenance expense.

A logical beginning for a program to increase both the usefulness of steam locomotives and their profit-making ability would be to investigate and determine the reasons for the frequent poor performance and low availability of this type of power. Quite often this arises, not from any inherent weakness of the steam locomotive but from the quality of maintenance it receives, particularly in comparison with the Diesel locomotive against which its availability and operation are frequently measured. This contention is borne out by an analysis of the latest report of the Bureau of Locomotive Inspection which includes 94,000 inspections of steam locomotives and 13,000 of locomotives other than steam, totals sufficiently representative to permit the drawing of dependable conclusions. Briefly, the report showed that 30 times as many defects were found on only five times as many steam locomotives as competitive types of power, and that 37 times as many of the former were in such poor shape that they were ordered out of service.

Eleven per cent of the steam locomotives inspected were found defective compared to 4.8 per cent of non-steam locomotives, and 7.5 per cent of the steam locomotives had defects sufficiently serious to warrant their being ordered out of service as against only 1.25 per cent of other power.

Such figures could show one of two things about steam power: that the steam locomotive is inherently addicted to the frequent occurrence of accident-causing defects, or that steam locomotives do not receive attention equivalent to that given to Diesel and electric locomotives. The effect of the first possibility appears to be minor, as the number of accidents caused by the failure of steam locomotive parts was only nine times that of other power, with eight times as many people killed. The figures, that is, are nearly in line with the ratios of the two types of locomotives for which reports were filed and tend to support the contention that the comparatively poor care given to steam power is, to a large extent, responsible for the lopsided defect and withdrawal-from-service ratios between the two categories of power.

The figures do not, of course, prove that higher maintenance standards is a cure-all that will both increase availability and reduce costs, but the disproportionate ratio of defects reported for safety reasons to the number of accidents on steam power from parts failures indicates that there is room for big improvement in the care given to steam locomotives. The provision of improved servicing and

repair facilities for steam power has a valid claim, in the railroads' interest, on a reasonable share of the funds available for additions and betterments.

ELECTRIFICATION POTENTIALS

There are two main reasons why no railroad electrification projects are being planned at the present time, viz., the high costs of the power distribution system which adds to taxable property, and the fact that an electric locomotive cannot run except under the overhead wire. The Diesel-electric locomotive is now in the ascendancy, having cleared many seemingly insurmountable hurdles one after another. The greatest threat which confronts it is the rising price of suitable fuel oil.

Taking the progress of the Diesel as one factor, and special conditions in the Northwest as the other, T. M. C. Martin of the Bonneville Power Administration presented a study of the potentialities of railroad electrification in his part of the country at a general meeting of the American Institute of Electrical Engineers, recently held in Milwaukee. His paper was entitled "The Present Competitive Position of Coal, Residual Oil, Diesel Oil, and Electricity as Energy Sources for Motive Power Operations in the Pacific Northwest."

Practical operating men will find points with which to disagree in such a study as this, which has to assume some arbitrary departures from existing practices. Nevertheless, Mr. Martin produces figures indicating that the presumptive return on investment for main line electrification in the Northwest would be very generous. He suggests that railroad managements should seriously consider using indigenous sources of energy, which in the Pacific Northwest means hydroelectric power.

It is abundant hydroelectric power and the high price of coal, oil and even wood which are responsible for many of the railroad electrifications in foreign countries. The United States has not yet felt this pinch, but continued increases in the price of fuel could bring it about.

Conditions in the Pacific Northwest are similar in many respects to those in countries where electric traction is predominant; the terrain is rugged, fuel must be shipped over long distances, and there is abundant water power. The railroads involved do not have the heavy traffic which is frequently the primary reason for electrifying, but real progress has been made by engineers seeking means to reduce the first cost of an installation. Mr. Martin's study is a valuable contribution to railroad planning. It suggests that there are situations where railroads may find in electric traction the best means of meeting their motive power requirements.

WHAT MAKES HIGH SPEED SERVICE PAY?

A consideration of some of the factors that must be explored before establishment of a high-speed merchandise service, and of the operating problems that are encountered

By F. N. NYE

Assistant to General Freight Traffic Manager,
New York Central System

The Interstate Commerce Commission in a recent report indicated that in 1946 the American railways handled 68 per cent of the nation's total intercity ton-mileage. The motor carriers handled 7½ per cent, the inland waterways, principally the Great Lakes, 14 per cent, the pipe lines, 10½ per cent and the air lines, less than 1 per cent. These modes of transportation furnish formidable competition to the railroads because of a lower rate structure.

Where rapid movement is necessary, transportation competition now lies principally between the railroads and the motor carriers, with the air lines and the non-scheduled cargo carriers aggressively entering the field to provide a premium service. The competitive traffic is largely manufactured goods of high value, paying more than average rates.

Shippers, both large and small, route their traffic upon two major considerations—service and rates. These reasonably may be regarded as of approximately equal importance; some shippers emphasize one, some the other. Service is more important on high grade traffic; rates loom larger on bulk commodities. Under present relative rate levels and certain government policies—the recent basing point decision, for instance—the railroads are handicapped in their sales efforts. Therefore, service becomes the principal factor, and of increasing importance.

The motor carriers are in a position to render good service. Public policy is oriented further to improve and expand our highway system. Much work is now in progress. Automotive engineers have shown great skill in designing trucks and trailers. The combination of good highways, in many cases super-highways, and modern vehicles permits expedited and direct movement literally between all points.

With improved highways and higher powered vehicles has come a liberalizing of speed limits. This permits faster truck schedules. Overnight truck runs of 300 miles and more are commonplace. Even when complying with a 50 m. p. h. top speed, today's trucks on modern highways can average 30 m. p. h.

The motor vehicle by reason of its convenient size is well adapted to unit loads, which can move directly and without transfer from shipper's platform to consignee's door. With recently liberalized size and weight limitations truck-load minimum weights generally range between 20,000 and 24,000 lb. These factors all combine to provide a flexible and expedited service which, with high speed and enlarged capacity, has increased the net ton-miles per vehicle-hour. It allows

substantial revenue based on ton-miles, with direct expense based largely on vehicle-hours.

Before the development of the motor vehicle there was a school of thought which believed that the optimum or most economical train speed was that which, taken in conjunction with then existing tractive forces, would produce the maximum ton-miles per train-hour. This thinking justified heavy tonnage moving at low speed. From the mechanical angle, indeed from the overall operating angle, that may at that time have been sound business, but today a new factor enters the equation—freight revenue. Today the railroads' economic problem must be approached by thinking in terms of revenue as well as in terms of operating expenses. A new balance must be struck and with modern motive power having maximum output at higher speeds the ton-miles per train-hour can be sustained and perhaps increased by moving better equipped and more efficient rolling stock at faster speeds.

What are the railroads doing to meet the situation?

Equipment Utilization High

Following World War I the overall average speed of freight trains on Class I railroads was about 12 m. p. h. It has now been increased to 16 m. p. h.—up 33 per cent. This appears very unimpressive but it must not be overlooked that this average speed is predicated on all types of trains, including local runs which are merely extended switching operations. It reflects all stops made for switching, for picking up and setting off cars, for meets, for fueling, watering, servicing and inspection. On symbol freights moving between major yards the average speed is much higher. It should also be recognized that heavy tonnages are involved and that the ton-miles per train-hour of railroad cars and trains are much greater than of highway vehicles regardless of the actual relative speeds. For instance, a hopper loaded with 50 tons of coal would produce 800 net ton-miles per hour at the overall average speed. The production of an entire train is obviously very substantial. A motor vehicle with 10 tons at 30 m. p. h. would turn out only 300 net ton-miles per hour. Assuming for most commodities that the carload minimum weight approximates twice the truckload minimum—on that basis the box car is as productive as the highway unit at only half the latter's speed. This indicates that utilization of railway equipment is reasonably efficient. Nonetheless it fails to meet our competi-

This article is an abstract of a paper, sponsored by the Railroad Division, presented before the American Society of Mechanical Engineers at the annual meeting of the Society on December 2.

tor's service time because his vehicles run approximately at twice a train's overall speed, and are not subject to yard detention at terminals or en route.

Confronted with this situation, which is further heightened by an expanding trend on the part of the motor carriers as new highways and modern equipment become available to them, it is vitally necessary that the tempo of rail service be stepped up. Many operating factors are involved in addition to speeding actual over-the-road time. It is generally recognized that terminal delays are a principal problem—these involve not only industrial switching at origin and destination, but also make-up and break-up of trains at the terminals and classification at intermediate yards. This can be solved by more efficient operation. It is being solved. Some yard delays are inescapable. However, what is accomplished during these periods is important for it permits the orderly arrangement of cars in trains, which by virtue of the easy rolling movement of flanged wheels over steel rails enables a single crew to handle many cars safely and efficiently, following each other precisely around curves, through tunnels, over bridges and via switches in and out of yards. This is an inherent advantage of the railroad—the massing of classified tonnage behind adequate motive power and the operation of a train delivering economical ton-mileage per hour.

One evidence of this economy is the fact that the average locomotive pulls a ton of freight and equipment one mile on less than two ounces of coal or its equivalent. Another evidence is the fact that for each employee, including all types of employment, the railroads on an average day move a ton of freight the equivalent of nearly 1,500 miles and in addition provide passenger service equal to an individual journey of about 100 miles.

The railroads are able to move freight 300 miles overnight. The New York Central in 1934 inaugurated overnight l. c. l. service between New York and Buffalo. The so-called "Merchandiser" was a pioneer venture. It was made up of passenger-equipped milk, express and express-refrigerator cars. It was operated in trains of moderate length at speeds up to 65 m. p. h. Due to wartime pressures and the heavy demands on equipment these trains were temporarily discontinued in 1942. Public acceptance of this service was encouraging, but it was apparent that if it was to be made permanent and expanded, properly equipped high-speed box car equipment of adequate load-carrying and cubic capacity would be necessary at reasonable cost.

N. Y. C. Symbol Trains

The influence of that service has been far reaching. A recent authoritative survey indicated that 26 railroads throughout the country are now operating at least 95 overnight symbol trains at distances over 300 miles. The longest overnight run is from Omaha to Chicago, a distance of 488 miles. The average of these runs is 341 miles. This is a significant beginning of faster freight service although admittedly it but scratches the surface considering that the American railways operate many thousand freight trains daily. The objective must be to raise the overall average speed of all freight trains at least 50 per cent.

I would like to be more specific and describe one of these new symbol freight trains and the operations auxiliary to it. The New York Central operates hundreds of freight trains every day. About 300 of them are so-called symbol freights operated regularly on fixed schedules to meet connections and markets. Many of these schedules are set forth in a fast-freight-train timetable which is given wide distribution. The Central's outstanding freight train—operating with some unavoidable exceptions since July 1, 1946—is known as the "Pacemaker," Symbols NB-1 westbound and BN-2 eastbound, operating nightly except Sundays between New York and Buffalo. It is the outgrowth of our pioneer "Merchandiser." These trains handle only merchandise freight in l. c. l. lots and in freight forwarder cars. The distance traversed each way is 429 miles. The schedule, averaged for both directions, approximates 11¼ hours with four intermediate stops to pick up and set off cars. The average elapsed speed is thus 38 m. p. h. The actual running time is about 10¼ hours for an average running speed of 42 m. p. h. The trains consist of specially equipped box cars, a pool of over 500 cars being required, mounted on high-speed easy-riding trucks and coupled through double-acting rubber-cushioned draft gears and equipped with high-speed braking gear. Drawn by modern Diesels, they are permitted a top speed of 65 m. p. h., when handling 60 cars.

"Pacemaker" cars by reason of their high mileage per round trip, their well-balanced tonnage in both directions and their fast turn-around cycle, receive excellent utilization. In addition, the unusual degree of lading protection provided, regardless of the high speeds involved, amply justified their moderate additional cost.

Cars making up the westbound service are pulled from the West Thirty-Third street freight station in New York City at 6:00 p. m. and are made up for departure at 7:45 p. m. Precise adherence to schedule is necessary as this train must proceed up the line in step with the fleet of through westbound passenger trains having similar departures from Grand Central Terminal. The train is due at East Buffalo at 6:50 a. m. and the Buffalo cars are at the downtown freight-house at the beginning of the working day. The westbound run leaves New York with 25 or 30 cars, handles a total of 50 or 60 by virtue of pick-ups and set-offs en route and arrives at Buffalo with about 40 cars. Many of these cars are carded beyond Buffalo to such points at Cleveland, Toledo, Detroit, Columbus, Cincinnati, Indianapolis, Louisville, Charleston, etc. West of Buffalo they move in symbol-train service commingled with other cars. The cars are given first-morning placement at stations to and including Buffalo, with second morning to points beyond, except that Louisville, Ky., and Charleston, W. Va., which are extreme points on the New York Central, are given third morning. The eastbound run is similar. The on-time performance of these cars is outstanding and has won us many friends. In fact this expedited and dependable scheduled service has attracted considerable department-store merchandise, to meet sales deadlines.

During a period when l.c.l. traffic has been declining "Pacemaker" tonnage has increased. It now represents about 8 percent of our total tonnage, which is

evidence that a modern standard of service not only can hold business in the face of spirited and expanding competition but can actually attract new high-grade traffic. Since its inauguration additional car lines have been added progressively to these schedules, and further expansion is anticipated. To make this possible an additional pool of approximately 500 cars is now being equipped.

Insofar as the high-speed train itself is concerned the prerequisites are suitable track and rolling stock and adequate motive-power capacity. As train speeds are elevated within limits applicable to this type of operation the capacity of motive power required increases approximately as the square of the speed. Rolling stock and track must be skillfully designed and adequately maintained to give safe and damage-free movement. Under modern industrial and commercial practices higher-speed operation will in general attract more revenue, but increases in speed are necessarily accompanied by higher operating costs and the law of diminishing returns requires due consideration. With carefully planned transportation and alert operating supervision much can be accomplished towards increasing interterminal scheduled speeds without increasing the maximum operating speed. The bypassing of intermediate yards through proper classification and grouping of cars and the control of terminal delays are important steps in this direction.

Eliminating Bottlenecks

Where bottlenecks exist careful study should be made looking toward their elimination. In modernizing any segment of a railroad to obtain more intensive utilization of track and facilities the alignment and profile, the adequacy of its bridges and structures, and strength of its track—rail, ballast, sub-soil—its servicing facilities, its signals and communications, its yards and terminals, all must be carefully examined and improved where necessary and economically feasible so that modern motive power and equipment can do their most effective work in moving tonnage at high speeds.

Expedited l.c.l. service, the core of our competition with the trucks, like other freight services, also depends on many factors besides high-speed trains, and some discussion of the numerous related problems is pertinent. Less-carload service is a specialized and complicated operation. Many problems are involved: for instance, transfers. L.c.l. freight consists of an endless variety of manufactured articles and consumers' goods. The individual shipments are light—and of all shapes and sizes, variously packed. They originate mostly in cities and large towns, but are destined to virtually every one of the two thousand stations on the New York Central System and to those beyond on other roads. It is obvious that each origin can not make cars to all destinations. This means that much freight, except that moving between important centers, must be routed from origin to a transfer making a car to the required destination or to some secondary transfer en route. On the New York Central each ton of l.c.l. freight transported averages 1.1 transfers en route. In "Pacemaker" service fewer transfers are involved because most of the freight so handled is

moved in through cars between major cities. Considerable "Pacemaker" tonnage is routed via Utica and to a lesser degree other points for transfer. Under the best current standards of railroad transportation each transfer means a 24-hour delay because inbound cars are placed at the transfer station in the morning, the transfer is made during the day and the outbound car is pulled and dispatched in the evening. Our transportation department has under constant study its extensive loading orders setting up where possible direct cars to obtain a maximum movement of through tonnage from origin to destination and holding transfer tonnage to a minimum consistent with reasonable loading per car. Our current merchandise-car schedules contain over 1,000 regular daily car lines between system stations and about 450 regular overhead car lines to foreign road transfers throughout the United States. The number of car lines which must be operated, and the rehandling of merchandise shipments via transfers from one car to another to complete the movement explains why l.c.l. merchandise car loadings account for about fifteen per cent of total revenue car loadings. The magnitude of the l.c.l. operation requires the most careful planning and supervision to make it successful.

Transfers not only entail delay; they are also costly. It costs the New York Central, under present wage levels, over \$2 per ton to handle l.c.l. freight at stations and transfers and each handling exposes the shipment to loss and damage. Freight handling and platform costs are essentially labor costs. Production per man-hour in railroad stations, as in most other industries, has deteriorated. The Central, in common with other railroads, is striving to increase present production. Where station layout and volume warrant, it has introduced mechanical equipment during the last two or three years at a cost of some \$300,000. This has increased production and justified itself. In certain cases it can effectively increase the capacity of the freight-house and so make unnecessary extensive alterations or additions. This is important because, when volume exceeds the capacity of a facility, congestion develops, costs rise and service deteriorates.

The Central now has in operation at principal stations and transfers over 240 self-propelled burden-carrying trucks, on which the driver rides with the freight being handled. Their performance has been encouraging and more have been ordered. We also have over 100 tractors to draw strings of four-wheel trailers and over 75 power-operated fork-lift trucks for handling machinery and freight mounted on skids and pallets. In addition some 70 odd power-operated platform lift trucks, 15 power-operated crane trucks, several power-operated chain hoists and nearly 150 hand-operated hydraulic lift trucks are in service. There are also large numbers of two-wheeled hand trucks, which are the basic freight-house tool and at most stations, because of volume and layout, the most economical vehicle for handling freight. Other railroads, too, have installed much mechanical equipment at their freight-houses.

Where interline l.c.l. freight must be transferred from one railroad to another at common terminals such as Chicago, St. Louis or Cincinnati, the railroads frequently accomplish it by operating trucks from one

freighthouse to another. The flexibility of the truck and its convenience in handling unit loads is thus utilized by the rail carriers to supplement their merchandise operations.

The basis of successful l.c.l. freight handling at stations and transfers is to keep it constantly in motion—planned motion—between car and pick-up and delivery truck, or between cars, or from one railroad to another. When it comes to rest momentum is lost. This wastes not only time, it also wastes money because expense is required to set it in motion again.

In addition to physical plant and equipment, intelligent planning and supervision must be provided. Through the medium of strengthened station organization further production increases are anticipated from local station personnel. This organization supervises the detailed operations at the freight stations, taking action where studies indicate the need, to create greater fluidity of movement through stations. This may be either a revision of methods, developing a more efficient use of manpower and equipment, or a complete change in operations, requiring the extensive use of new equipment, manual and mechanical. Absorption of increases in wage levels by increased production is the objective.

To meet motor carrier competition successfully on merchandise traffic a competitive door-to-door service must be made available. On the New York Central pick-up and delivery by motor vehicle is provided at virtually all points of any consequence; probably 95 percent of its eligible l.c.l. tonnage has it available. The transfer between truck and car, of course, requires time, and careful planning and supervision is necessary to minimize potential delays. Most shippers desire late afternoon pick-ups just as consignees prefer early morning delivery. This poses a problem on the outbound movement of getting the pick-up truck back to the freight house, unloading, billing and transferring the freight into the assigned car to meet the prescribed cut-off hour. Freight houses between 3 p.m. and 5 p.m. are at a peak of activity.

On inbound moves it is essential quickly to switch the arriving car against the house. Here delays of a day or two due to accumulated cars can easily develop unless the daily situation is carefully watched and corrective action taken. The freight must then be unloaded, checked and promptly reloaded in route order in the delivery truck which makes actual delivery. The terminal problem is a tough one. Unless it is successfully met it may offset the time saved by high-speed runs over the line.

It should also be remarked in connection with the l.c.l. operating problem that about 20 percent of l.c.l. traffic is to or from—mostly to—small rural communities.

This type of traffic is difficult to handle efficiently and economically; its volume is dispersed and, therefore, small over a given subdivision. It requires local transfer and must be "peddled" by way-freight trains. This type of service frequently runs into overtime and contributes significantly to the low overall average speed of freight trains. To meet these conditions better the Central over 20 years ago began to substitute motor trucks for peddler cars to serve the small communities from the nearest suitable break-bulk point. This

service has been progressively expanded until the system is now about one-quarter covered.

Authority has been received recently from the I.C.C. to inaugurate such operations throughout the Big Four district, serving 400 local stations along 2,600 miles of line. We are currently seeking complementary authority from the state commissions in Ohio, Indiana and Illinois. When the Big Four is placed in operation the system will be about one half covered. Corresponding plans for the Michigan Central, Lines West and other districts are under study because this type of coordinated operation makes for better service at lower cost. It might be remarked in passing that motor carriers and their organizations have resisted the development of coordinated motor services by the railroads.

Loss and Damage

Loss and damage is a serious problem and represents an out-and-out economic waste. In 1947 it represented a loss to the American railroads of \$122 million, an all-time high. This to a considerable extent may be attributed to the current inflated prices of commodities damaged. Nonetheless the actual physical damage has been great. About one-third of total loss and damage runs to l. c. l. traffic although this traffic constitutes but a small percentage of total tonnage. Outstanding in the Central's attack on this problem is the inauguration of a training program, now over a year old, designed to reach local station forces and their supervision. It is not the usual sort of thing, because it places in the hands of the men themselves means with which they can and do correct improper practices. This program presently embraces 128 principal stations on the system, which collectively handle the great bulk of our l. c. l. traffic. Results so far have been encouraging and the program is being actively continued and expanded. Equally important is the continuing effort to educate and supervise road and yard crews so that they handle their trains and switch their cars carefully. This is of the utmost importance because switching impacts exceeding 4 m. p. h. are frequently damaging to fragile lading.

To carry such training programs to our personnel wherever they may be located we have constructed and now have in operation a specially equipped training car. This car accommodates 54 persons and contains projectors for showing motion pictures, charts, etc., to supplement talks given by our various supervisors. It can be used around the clock at any yard, however remotely situated, because it carries its own Diesel generator to provide light, ventilation and electric current for its various devices. It also provides sleeping quarters, kitchen and office space for its crew.

Our Loss-and-Damage Prevention Bureau works with shippers and station forces to post them as to approved loading and stowing methods, proper packaging techniques, etc. The railroads are striving to improve the standards for and quality of fiberboard containers which are today's predominant packing. A fundamental to safe damage-free movement is well-designed, adequate packaging. An effective method to cut down damage is to bulkhead merchandise cars. This has the advantage of simplicity and economy.

HEARING ON INTERIM RATE INCREASE CONCLUDED

Oral argument begun December 8—Protestants ask for proof of efficient railroad operations and showing as to the effect of "featherbed" rules on cost

Oral argument before the Interstate Commerce Commission got under way in Washington, D. C., December 8 on the railroads' Ex Parte 168 motion for an immediate freight-rate increase of 8 per cent to remain in effect as a measure of interim relief until the commission passes on the carriers' petition for a permanent advance of 13 per cent. The argument, before the entire commission and a cooperating committee of state commissioners, was scheduled to extend over three days, a total of 16 hours having been allotted to counsel for the carriers and other interested parties.

It opened the day after the close of hearings before the commission's Division 2, consisting of Commissioner Aitchison, who presided, and Commissioners Splawn, Mahaffie, and Alldredge. Members of the state commissioners' committee, who sat with the commission for the oral argument, were also on the bench with Division 2 during the hearings. They are Chairman N. J. Holmberg of the Minnesota Railroad and Warehouse Commission, Chairman N. B. Knight, Jr., of the Louisiana Public Service Commission, and Commissioner Kenneth Potter of the Public Service Commission of California. The hearings opened November 30, and were concluded on December 7. Jacob Aronson, vice-president and general counsel of the New York Central, is serving as chief counsel for the carriers in the case; and the oral-argument schedule allowed him three hours for the railroad presentation.

Raises "Featherbedding" Issue

Proceedings at the hearing sessions subsequent to those reported in *Railway Age* of December 4, page 46, included testimony and cross-examination of additional railroad witnesses; presentations of protestants; and the filing of motions asking the commission to dismiss the carriers' interim-relief motion, to investigate the effect of "featherbed" rules on operating costs, and to require the submission of evidence showing the extent to which the railroads are supplying "adequate" service "at the lowest costs consistent with the furnishing of such service," as contemplated by the Interstate Commerce Act.

The motions were filed on behalf of the Department of Agriculture by its attorney, James K. Knudson; on behalf of the Southeastern Association of Railroad and Utilities Commissioners by its president, Chairman Walter R. McDonald of the Georgia Public Service Commission; on behalf of the Southern Pine Association by its traffic manager, A. G. T. Moore; and by Parker McCollister, counsel for the Associated Indus-

tries of the State of New York, the United Brewers Foundation and various automobile manufacturers.

The motion of the Department of Agriculture was a presentation of 22 mimeographed sheets, and it listed C. E. Childe, formerly a member of the defunct Board of Investigation and Research, as the department's transportation consultant. This was the motion which called for a showing as to the extent to which the railroads are supplying the adequate and efficient service contemplated by the act.

It suggested that such evidence be supplied through testimony and exhibits prepared by the "experienced and expert" staff of the commission after a study of data taken from the commission files or obtained from the railroads. The department would have the commission make this staff study part of its investigation of the proposed permanent increase of 13 per cent, and, meanwhile, it would have the interim-relief motion denied.

Sees No "Emergency"

The department's argument in support of the motion asserted that there is no "national emergency" requiring the proposed increases. It was conceded that the railroads are "entitled to a proper return on their investment," but the department, so the argument ran, has become concerned lest further increases in freight rates turn out to be "injurious to the permanent stability of the railroads themselves as well as to the general public." Thus the suggestion that "all methods of increasing efficiency and decreasing costs should be exhausted."

The argument went on to cite various pronouncements of the commission, the former federal coordinator of transportation, and the B. I. R. as to economies that would result from such coordinating arrangements as unifications of terminals, pooling of freight cars, integration of merchandise traffic, and the reduction of circuitous routing. In summing up, the department was unable to state "with accuracy" from the data "now available" the "aggregate amount of increased net revenues which can be obtained by the railroads immediately through coordination and improvements in their services." It found it "obvious," however, that "at present price levels the total possible savings . . . will be over \$1,000,000,000 annually and may well be much greater."

The motion of the southeastern state commissioners had much the same basis as that of the Department of Agriculture. It, too, referred to reports of the former

coordinator and B. I. R., saying that they indicated possible savings of "several hundred million" dollars. It asked the commission to delay its decision on the proposed rate increase until it had determined whether the railroads are being operated "efficiently and economically," and whether the carriers have complied "to the fullest possible extent" with the recommendations of the coordinator and B. I. R.

Wants Data on Passenger Service Losses

The motion filed by Traffic Manager Moore of the Southern Pine Association was the one calling for a commission investigation of "featherbedding," or, as the motion put it, of "labor operating rules to determine the lack of efficiency in railroad operations and the excessive cost burden thereof which has been placed upon the shipping public." This motion also asked the commission to call upon the railroads to furnish information as to losses from passenger, express and mail services, and as to car supply. "The commission," it said, "has a clear duty . . . to lend its aid in determining whether and to what extent railroad economies can be effectuated in lieu of further increases in freight rates."

Mr. Moore prepared the way for the "featherbedding" phase of his motion by asking several of the railroad executives who appeared as witnesses if any progress had been made in the way of obtaining relief from "featherbed" rules. The replies were to the effect that little progress had been made, and Mr. Moore then asked if "help" on that matter would be welcomed. The executives replied that it would.

President C. McD. Davis of the Atlantic Coast Line was one of those who made such a reply, but he added that he didn't understand that the commission was the tribunal from which "help" could be expected. Chair-

man Aitchison asked what Messrs. Moore and Davis meant by "help." And Mr. Moore then asked Mr. Davis if a finding of fact by the commission that "featherbed" rules cause "burdensome" operating costs would be "helpful." Mr. Davis replied that it would, and Chairman Aitchison asked: "How?"

I. C. C. Doesn't Pass on "Moral" Questions

The A. C. L. president suggested that it would give the railroads "moral" support; but he gave a negative reply to Chairman Aitchison's next question which asked if it was the function of the commission "to pass on moral questions." Whereupon Mr. Moore asked the witness if he did not think that any finding as to "burdensome" costs was a proper function of the commission. "That's argument, I'd say," was Mr. Davis' reply. And Mr. Moore's parting shot was: "Well, I didn't start it."

The McCollester motion was a request that the commission deny or dismiss the interim-relief motion and proceed to full hearing on the proposed permanent increase of 13 per cent. Mr. McCollester said that his clients wanted his motion on the record to point up their position that the railroads have not "on their own evidence" made a case for interim relief. He went on to argue that rate increases without full hearing should be granted only in "exceptional" cases of "crises" in the financial affairs of the carriers.

No such situation had been shown, Mr. McCollester said, adding that neither increases in railroad costs nor a desire to improve railroad facilities comprise grounds for authorizing rate advances without full investigation.

Ralph Budd, president of the Chicago, Burlington & Quincy, whose testimony was reported in last week's issue, was followed in the witness chair by several



SINCLAIR OPENS NEW LABORATORIES NEAR CHICAGO. — The Sinclair Refining Company, on October 22, formally opened its new research and development laboratories at Harvey, Ill., 22 mi. south of Chicago's "Loop". Comprising nine buildings and costing several million dollars, the new facilities occupy 20 acres and employ 400 men and women. The company says the research center is the heart of its \$150 million expansion program and will be devoted to Sinclair's search for more and better petroleum products

other railroad witnesses, including President Davis of the A. C. L. whose comment on "featherbedding" is noted above. First came W. W. Hale, vice-president of the Southern Pacific, who was subjected to considerable cross-examination as to factors taken into consideration by traffic officers when they recommended that the interim and permanent increases of 8 and 13 per cent, respectively, be sought.

While General Solicitor F. G. Hamley of the National Association of Railroad and Utilities Commissioners was questioning Mr. Hale along those lines, Chairman Aitchison broke in to say that the question before the commission was not whether the traffic officers used the best judgment, but "what the situation is." Mr. Aitchison added that "we are not trying the traffic officers for the purpose of seeing whether we give them 'excellent' or 'good' on their efficiency rating."

P. R. R. Situation

Walter S. Franklin, executive vice-president of the Pennsylvania, discussed that road's financial situation as illustrative of conditions existing generally on eastern roads. The P. R. R.'s rate of return on its depreciated investment in 1947 was only 1.45 per cent, and the prospective 1948 return is estimated at 2.96 per cent, Mr. Franklin said, emphasizing that these were years of the road's largest peacetime business. He estimated that the 1949 return would be 4.67 per cent if the proposed increases are granted. Mr. Franklin also said railroad expenses and costs would be much higher than they now are had it not been for "drastic economies and increasing efficiency in operation."

Under cross-examination Mr. Franklin conceded that the higher rates proposed would result in some loss of traffic, but he expected such diversions to be largely offset by the return to the railroads of traffic lost this year because of car shortages. When Mr. Hamley asked if car shortages would be "entirely removed" in 1949, Mr. Franklin replied that he was "afraid not." To Mr. Moore's inquiries about "featherbedding," Mr. Franklin replied that progress toward the elimination of such working rules was "not much to brag about up to the present time."

Clark Hungerford, president of the St. Louis-San Francisco, the next railroad witness, was questioned by Wilbur LaRoe, counsel for the American Paper and Pulp Association, who undertook, as he put it, to draw a distinction between the railroads' needs for capital improvements and their needs for additional revenues to cover increased costs. Mr. Hungerford conceded that the carriers might "get by" with an increase of about 6 per cent, but there would be nothing in it for improvements in facilities.

John F. Finerty, counsel for the Glass Container Manufacturers Institute and the American Zinc Institute, undertook to question Mr. Hungerford on the justification for the interim-relief motion. When Mr. Aronson objected, Mr. Finerty suggested that his questioning might show an "irresponsible attitude" on the part of railroad management. The questioning was cut off when Chairman Aitchison observed that it was the commission's responsibility to determine whether rates should go up. All Mr. Hungerford is entitled to

do, the chairman added, is to "throw" the matter "in our lap"; so "let's not go into any more of these subjective and metaphysical matters."

Mr. Finerty explained that he was "trying to find out why they ask 8 per cent when they only need 5 per cent." Railroad counsel chorused "No," but Mr. Aitchison said that Mr. Hungerford could tell the commission why he thinks it should grant 8 per cent—"if you haven't already done so." The Frisco president thought he had.

President Davis of the A. C. L., under cross-examination by Mr. Knudson, estimated that it would require a freight-rate increase of 6 per cent to offset only the wage increases granted recently by the railroads. He conceded that much traffic was susceptible to truck competition, but thought that the trucks, too, will have to increase their rates.

Mr. Davis did not know the extent to which his road failed to publish the increases authorized in Ex Parte 166, or removed the increases after they were published to meet competition. He was sure that there were "no wholesale reductions." He said later on that the A. C. L. intends to hold "every dollar" that it can of any increase granted in the present proceeding.

Railroads Pay Freight Rates

J. V. Norman, counsel for the Southern Traffic League, suggested that the proposed increase in coal rates would cost the A. C. L. money because its fuel coal came from off-line points. Mr. Davis agreed, and he also agreed with Chairman Aitchison's suggestion that "if other roads bought strawberries, the Atlantic Coast Line would get some additional revenue."

Other railroad witnesses included Dr. Jules Backman, economist, of New York University; J. L. Sheppard, assistant vice-president (traffic) of the Illinois Central; C. E. Huntley, secretary-treasurer of the American Short Line Railroad Association; and Fred Carpi, vice-president (traffic) of the Pennsylvania.

Mr. Carpi offered no direct testimony at the hearing; he was among those called for cross-examination on verified statements which they had filed. In response to questions from Mr. Knudson, Mr. Carpi expressed his view that there would be further rises in prices, and that wages, too, would go higher. Chairman Aitchison broke in to say all except those of I. C. C. members. Mr. Carpi replied that "we may correct that."

Presentations of protestants followed the cross-examination of the railroad witnesses at the sessions before Division 2. Meanwhile several such presentations had been heard by examiners at "side-show" hearings. These protestants included numerous individual shippers, shipper organizations, and state and other governmental agencies. Generally, they opposed the interim-relief motion, called for restoration or preservation of traditional rate relationships in connection with any increase granted, and otherwise explained their individual situations. They also offered considerable testimony indicating the diversion of traffic from the railroads as a result of previous general increases, and warned that such losses of business would be multiplied if the carriers' present proposal is approved.

Forward end of the Matisa ballast cleaner, showing how the digging and conveying chain extends under the track



A machine is now in service on the Atchison, Topeka & Santa Fe, which, in a single operation, cleans all the ballast in the track, including that in the shoulders, in the cribs, and continuously beneath the ties to any depth up to 36 in. Introduced into this country by the Matisa Equipment Corporation, Chicago, the machine was developed by this company in Switzerland, and during the past 10 years has been used in England, France and Belgium. On the Santa Fe the machine is being used under a rental arrangement to renovate the ballast on a 10-mi. section of track in Iowa.

An important element of the machine is a continuous digging and conveying chain, operating in a plane inclined at an angle of about 45 deg. with the horizontal, which is threaded beneath the track at its forward end. The chain operates between a head-end control unit riding on the rails and a conveyor and screening unit at the rear end, also mounted on the track. The latter unit, to which the dirty ballast is delivered by the continuous chain, separates the dirt from the ballast, returns the ballast to the track and desposits the dirt on the right-of-way. Ahead of the machine the track is jacked up and blocked to carry its weight after the ballast has been removed and until it is replaced.

On the Santa Fe the Matisa machine, working on "dead" track, cleans the entire ballast section to a depth of six inches below the bottoms of the ties. The complete operations involve a total force of 58 men, including a foreman and 2 assistant foremen. This force renews ties ahead of the machine, and raises, tamps and lines the track behind it. Present progress is at the rate of 900 to 1,000 ft. of track per day.

[A more detailed description of this machine and its method of operation appears in the December *Railway Engineering and Maintenance*—EDITOR]

SWISS MACHINE MAKES "CLEAN SWEEP" IN RENOVATING BALLAST



Looking forward from a point near the front end of the machine as it makes its way through a highway grade crossing. The width of the excavated area is 12 ft. 5 in.

A relatively small portion of the outstanding stock of American railroads (\$100 million out of approximately \$7,000 million) is held by investment companies, but recently a reawakened interest in carrier equities has been shown by several of these organizations. This development reflects, on the one hand, the financial markets' comparatively poor opinion of railroad earning power, and on the other the influence on that opinion of improved revenues and resulting dividend increases and resummptions.

The author is a recognized independent authority on American investment companies. His articles on various aspects of that industry appear frequently in financial periodicals. The tabulations accompanying this article, showing the holdings of investment companies in the equities of railroads, were prepared especially for *Railway Age*.

HOLDINGS OF 74 INVESTMENT COMPANIES IN COMMON AND PREFERRED STOCKS OF RAILROADS

(As of Sept. 30, 1948)

All issues are common stock unless otherwise indicated

	Total Shares Held (thousands)	Per Cent of Issue Out- standing	No. of Companies Holding
Alabama Great Southern	7.3	4.7	3
Atchison, Topeka & Santa Fe ..	54.7	2.3	21
Atchison, Topeka & Santa Fe 5% non-cum. Pfd.	13.5	1.1	5
Atlantic Coast Line	71.5	8.7	12
Baltimore & Ohio	88.4	3.4	10
Baltimore & Ohio 4% non-cum. Pfd.	18.4	2.1	3
Canadian Pacific	46.8	#	4
Chesapeake & Ohio	50.5	#	7
Chesapeake & Ohio 3½% cum. cv. Pfd.	8.9	4.5	3
Chicago & North Western	37.0	4.5	6
Chicago & North Western 5% Pfd. "A", v.t.c.	32.3	3.5	6
Chicago, Milwaukee, St. Paul & Pacific 5% Pfd. "A", v.t.c.	26.7	2.4	5
Chicago, Rock Island & Pacific	66.6	4.4	10
Chicago, Rock Island & Pacific 5% cum. Pfd. "A"	23.1	3.3	8
Delaware & Hudson	53.5	9.9	4
Denver & Rio Grande Western 5% cum. Pfd.	19.6	6.0	3
Erie	115.2	4.7	7
Erie 5% cum. Pfd. "A"	33.0	8.2	5
Great Northern non-cum. Pfd.	119.8	3.9	26
Gulf, Mobile & Ohio	30.4	3.3	6
Gulf, Mobile & Ohio 5% cum. Pfd.	44.2	15.6	10
Illinois Central	106.5	7.8	12
Kansas City Southern 4% non- cum. Pfd.	34.2	16.3	5
Louisville & Nashville	33.0	1.4	12
Missouri-Kansas-Texas	24.0	3.0	3
New York Central	28.8	#	7
New York, Chicago & St. Louis New York, Chicago & St. Louis 6% cum. Pfd. "A"	2.1	#	3
Norfolk & Western	22.2	6.2	11
Norfolk & Western	35.1	#	9
Northern Pacific	93.4	3.8	14
Pennsylvania	93.3	#	12
Pittsburgh & Lake Erie	19.5	2.3	3
St. Louis-San Francisco 5% cum. cv. Pfd. "A", v.t.c. ..	12.3	2.0	5
Seaboard Air Line, v.t.c.	36.3	4.3	3
Seaboard Air Line 5% non- cum. Pfd. "A"	14.4	9.6	4
Southern Pacific	187.0	5.0	27
Southern	122.1	9.4	15
Southern 5% non-cum. Pfd. ..	42.1	7.0	9
Texas & Pacific	1.5	#	2
Union Pacific	65.7	1.5	16
Union Pacific 4% non-cum. Pfd.	13.8	#	3
Virginian 6% cum. Pfd.	1.7	#	2
Wabash 4½% cum. Pfd.	26.1	8.4	4
Western Maryland	5.5	1.0	2
Western Pacific	21.0	5.1	4
Western Pacific "A" 5% cum. ptc. Pfd.	24.8	7.8	8

#Total holdings less than one per cent of stock outstanding.

INVESTMENT COMPANIES SHOW

The recent additions of railroad equities to the portfolios of trust managements, and the added commitments of others already holding railroad stocks, are expressions of confidence in the industry of particular significance, because these investment companies, which were practically unknown in this country 25 years ago, have become the largest institutional investors in common stocks in America. Today the net invested assets of the trusts total \$2 1/3 billion and their securities are held by approximately a million investors.

The funds of the investment companies are engaged chiefly in the business of investing and reinvesting in a fairly well diversified list of securities. There are two chief types of investment companies—the open-end and closed-end. The open-end company is continuously offering new participations to investors and is at all times ready to repurchase its investors' stock at a price determined by a valuation of the underlying portfolio securities. Selling price to the public is also calculated on such valuation usually plus the addition of a certain fixed percentage to cover distribution costs. The closed-end trust obtains its capital from the public at infrequent intervals, much as does the usual industrial company, and the price of its securities is the result of demand and supply on some stock exchange. The latter companies were sponsored for the most part by stock brokerage and investment banking firms and, in contrast to the open-enders, frequently have more than one class of securities outstanding in the hands of the public.

Open-end funds also are differentiated among themselves by certain characteristics. The *stock fund* invests and reinvests in a diversified list of common stocks as well as preferreds and bonds, usually of the more speculative type. At times, substantial portions of its assets may be in cash and government bonds. The emergence of the *balanced open-end* companies as a popular investment medium has occurred only over the last ten years. This type of fund has a portfolio diversified among common stocks and the medium-to-better grade preferred equities and bonds, its objective generally being to obtain a relative degree of stability of principal and steady flow of income. There are also several types of specialized funds concentrating investments in preferred stocks, bonds of differing grades, low-priced stocks, and securities of various industries.

Another broad classification of trusts is between diversified and non-diversified companies. The diversified company must restrict at least 75 per cent of its assets to cash and cash equivalents (including governments) and securities of companies no more than 10 per cent of whose voting stock is owned by the trust. Such investment cannot exceed 5 per cent of the total assets of the investment fund. This distinction is defined under the Investment Company Act of 1940 which specifically excludes from its jurisdiction under section

INCREASING INTEREST IN RAILROAD STOCKS

Holdings of 74 trusts in railroad equities analyzed

By HENRY ANSBACHER LONG

3(b) (9) companies investing in the railroad field, such as Alleghany Corporation which is subject to Interstate Commerce Commission surveillance.

The investment companies today are for the most part of the diversified type and those trusts which invest any noticeable part of their assets in special situations, either for purposes of permanent investment and control or of profit from a temporarily dominant position in a rehabilitation plan, are in the decided minority.

Investment in railroad bonds by companies in the investment trust field is comparatively light today, and does not total much over \$100 million in market value. Approximately half of this amount is concentrated in the portfolios of two management groups—over 40 per cent in Keystone Custodian Funds and 10 per cent in Distributors Group. Several trusts had much larger representation a few years ago, for the most part in reorganization situations.

Measured by total net assets, overall commitments of investment companies in the stocks of railroad companies still are not very heavy in spite of the recent expansion of interest. Southern Pacific, which recently increased its regular quarterly dividend rate from \$1.00 to \$1.25, was the most widely held of all rail commons, an investment in 27 portfolios having a total market value of \$10,700,000 at the September 30 price. This, however, represented only 5 per cent of the outstanding issue.

Almost equal in popularity was Great Northern preferred, held in the portfolios of 26 trusts, but the total market value so held was only half that of Southern Pacific. Holdings totaled 119,800 shares. Great Northern was added by five managements during the third quarter, and 24,000 shares were bought by five trust managers during the June quarter.

The third most widely held issue was the common stock of the Atchison, Topeka & Santa Fe, 21 trusts holding a total of 54,700 shares with a market value of \$6 1/3 million. As in the case of Great Northern, the investment measured as a percentage of the total issue outstanding, i.e. 2.3 per cent, was not particularly heavy, but trust popularity gives due recognition to the extra dividend, the wide earning coverage and the market's discussion of the possibility of a stock split next year.

While only 17 trusts held Union Pacific, ranking it fourth in popularity, their total dollar investment of \$5,800,000 was greater than that in Great Northern. There was little activity in this issue during the last six months.

Southern, Northern Pacific and Atlantic Coast Line

also were well represented, although not as widely held as the previously mentioned issues. Holdings of two of these carriers represented a larger percentage of their total stock outstanding than even the trust totals in Southern Pacific. Fifteen funds held 122,100 shares of Southern common which represented 9.4 per cent of the outstanding issue.

Twelve investment companies held 8.7 per cent of the outstanding common of Atlantic Coast Line. While Coast Line was well bought during the June quarter it is particularly interesting to note that it was the only carrier given any favorable renewed attention during the first three months of the year. Northern Pacific was liked by 14 funds.

Among the preferred issues, attention should be called to the respectable percentages of outstanding stock held in total portfolios. These equities were not as widely held as the commons and the larger lots were concentrated chiefly in the various preferred and specialty funds of National Securities and the Keystone Custodian Funds. The two exceptions to this concentration were the 6.2 per cent representation in Nickel Plate preferred and the 7 per cent investment in the Southern non-cumulative issue. Other representative total commitments in outstanding preferred stock issues were 8.2 per cent of Erie preferred, 15.6 per cent of Gulf, Mobile & Ohio, 16.3 per cent of Kansas City Southern, 9.6 per cent of Seaboard Air Line, and 8.4 per cent of Wabash.

Total equity investment in the railroad industry, about \$100,000,000, is less than 5 per cent of all assets in investment companies. Outlook for the carrier shares, substantiated by the trend of increased purchases of their stock by the trusts, however, points to a more heavy representation in the industry over the ensuing months. Investment companies—other than special preferred, low-priced or industry funds—with 7 1/2 per cent or more of their net assets in rail commons and preferreds are the following:

	Per Cent
National Securities—Income	33.5
Incorporated Investors	19.6
Republic Investors	15.5
Axe-Houghton	13.4
Axe-Houghton "B"	11.7
Fully Administered Shares	11.6
Diversified Investment Fund	11.0*
George Putnam Fund	10.3
Wisconsin Investment Co.	9.9
Delaware Fund	9.7
General Investors Trust	9.4
Investors Management Fund	8.5
Fundamental Investors	8.4
Knickerbocker Fund	8.4
Keystone Custodian Funds S 1	7.6
Sovereign Investors	7.5

*Subject to verification

PRINCIPAL RAILROAD STOCK HOLDINGS OF INVESTMENT COMPANIES — SEPTEMBER 30, 1948

Figures indicate hundreds of shares held. Issues held by less than two companies are not tabulated.

RAILROADS (in 100 shares)	Alabama Gt. Southern	Atchafalaya, Topeka & Santa Fe	Atchafalaya, Topeka & Santa Fe 5% non-cum. Pfd.	Atlantic Coast Line	Baltimore & Ohio	Baltimore & Ohio 4% non-cum. Pfd.	Canadian Pacific	Chesapeake & Ohio	Chesapeake & Ohio 3 1/2% cum. cv. Pfd.	Chicago & Northw.	Chicago & Northw. 5% Pfd. "A", v.t.c.	Chic., Mil. S. P. & Pac. 5% Pfd. "A", v.t.c.	Chicago, Rock Island & Pacific	Chic., Rock Is. & Pac. 5% cum. Pfd. "A", v.t.c.	Delaware & Hudson Co.	Denver & Rio Gr. Wn. 5% cum. Pfd.	Erie	Erie 5% cum. Pfd. "A"	Great Northern non-cum. Pfd.	Gulf, Mobile & Ohio	Gulf, Mobile & Ohio \$5 cum. Pfd.	Illinois Central	Kansas City Southern 4% non-cum. Pfd.
BALANCED FUNDS:																							
American Business Shares		22			40									22				118					
Axe-Houghton Fund			1										4					10					
Axe-Houghton Fund "B"																							
Boston Fund		1	25										2						40				
Commonwealth Investment Co.		7		8													18	16					
Eaton & Howard Balanced Fund		10			16																	10	
Fully Administered Shares																							
General Investors Trust																							
Hospital Life Trust																							
Investors Mutual			50					215	41									200					
Johnston Mutual Fund	45							100						24				60	30		64		70
National Securities—Income																		15	2				
Nation-wide Securities																		2					
Nesbitt Fund																		50	4		17		
George Putnam Fund		25				200					70				50								
Russell Berg Fund								36											50				
Scudder Stevens & Clark		2	4						30														
Shareholders Trust of Boston																							
Wellington Fund																		80					
Whitehall Fund													10								10		
Wisconsin Investment Co.																							
OPEN-END STOCK FUNDS:																							
Affiliated Fund			60										30				200	150	103				
Bowling Green Fund		4																					
Broad Street Investing																							
Bullock Fund																							
Delaware Fund		2																		30		4	
Diversified Industry Shares†					12					15													
Diversified Investment Fund†		16									28										36		4
Diversified Preferred Stk. Fund†											4							6			3		6
Dividend Shares		37																140	5				
Eaton & Howard Stock Fund													70	65		43							
Fidelity Fund			80																				
First Mutual Trust Fund			10																10		10		
Fundamental Investors		44	90	210				40	20			130											
General Capital Corp.		4						170				250		430	100	580			20				
Incorporated Investors			350																8			470	
Institutional Shares																							
Investment Co. of America																							
Investors Management Fund		13	40	90						10		30											
Keystone Custodian Funds																							
Series K-1, K-2, S-1, S-4††			55	223	153			20		95	158	78	82	15	53	264	129		20		139		130
Knickerbocker Fund			110																20				
Loomis-Sayles Second Fund																			20				
Low-Priced Shares—Group Securities								35												35			
Massachusetts Investors Trust		300											68	27								150	
Mutual Investment Fund								4															
National Securities—Low-Priced																							
National Securities—Pfd. Stock					55															10			
National Securities—Speculative																							
National Securities—Stock	18							60			45		5	30				94			110		102
New England Fund																							
Republic Investors		3																					
Selected American Shares		4		5																		9	
Sovereign Investors		1		3		85						65							55			35	
State Street Investment Corp.																							
Union Common Stock Fund																					261		
Union Preferred Stock Fund																					40		34
CLOSED-END COMPANIES:																							
Adams Express																							
American European Securities		10																	35				
American International Corp.																							
Atlas Corp.‡																							
Blue Ridge Corp.								70	18			20	20										
Capital Administration																							
Chicago Corp.‡												18											
National Shares Corp.††		9																					
Overseas Securities																							
Pacific American Investors‡	10			10	10																		
Railway & Light Securities‡																							
Selected Industries																							
Tri-Continental Corp.																							
SPECIALTY FUNDS:																							
Railroad—Group Securities		24		44	50	15	148																
Railroad—New York Stocks		9		15	84					40			23				30		51	95	13	45	46

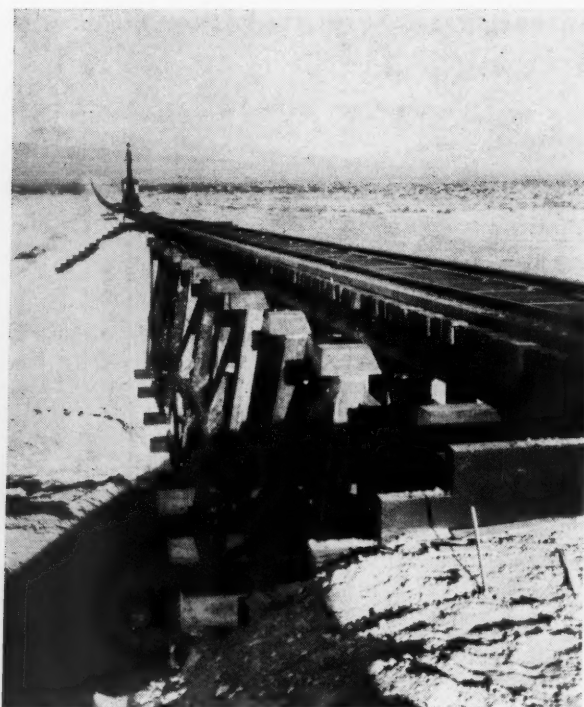
‡ Holdings reported on July 31, 1948.
 § Holdings reported on June 30, 1948.
 † Holdings reported on Oct. 15, 1948.
 †† Holdings reported on Aug. 31, 1948, unless otherwise indicated.
 ††† Formerly National Bond and Share.
 †††† Recent holdings in S-2 and S-3 not verified.

1948 PRINCIPAL RAILROAD STOCK HOLDINGS OF INVESTMENT COMPANIES — SEPTEMBER 30, 1948

Figures indicate hundreds of shares held. Issues held by less than two companies are not tabulated.

RAILROADS (in 100 shares)	Louisville & Nashville	Missouri-Kansas-Tex.	New York Central	N.Y., Chic. & St. Louis	N.Y., Chic. & St. Louis 6% cum. Pfd. "A"	Norfolk & Western	Northern Pacific	Pennsylvania	Pittsburgh & Lake Erie	St. Louis-San Fran'co 5% cum. cv. Pfd. "A", v.t.c.	Seaboard Air Line, v.t.c.	Seaboard Air Line 5% non-cum. Pfd. "A"	Southern Pacific	Southern	Southern 5% non-cum. Pfd.	Texas & Pacific	Union Pacific	Union Pacific 4% non-cum. Pfd.	Virginian 6% cum. Pfd.	Wabash 4 1/2% cum. Pfd.	Western Maryland	Western Pacific	Western Pacific "A" 5% cum. ptc. Pfd.
BALANCED FUNDS:																							
American Business Shares	41												13	110			70						
Axe-Houghton Fund			30	14	13		5					22											
Axe-Houghton Fund "B"				2	3		8					10											
Boston Fund													3										
Commonwealth Investment Co.																	20						
Eaton & Howard Balanced Fund			30		6		22					8		6									
Fully Administered Shares												12											
General Investors Trust																	6	2	7				
Hospital Life Trust	4					6											70	56					
Investors Mutual					18				95														
Johnston Mutual Fund																							
National Securities—Income	75				10				70						37					65	80	20	
Nation-wide Securities															10							5	
Nesbitt Fund																							
George Putnam Fund													85		30		60						
Russell Berg Fund							10									3	2					20	
Scudder Stevens & Clark						40																	
Shareholders Trust of Boston													4				2		10			25	
Wellington Fund								10									80						
Whitehall Fund																							
Wisconsin Investment Co.						10		15															
OPEN-END STOCK FUNDS:																							
Affiliated Fund					39			350					150	150			100						
Bowling Green Fund													5				4						
Broad Street Investing	26																						
Bullock Fund																							
Delaware Fund													10				5					2	
Diversified Industry Shares†			18				8																
Diversified Investment Fund†	22				15		53						45	32	15							4	
Diversified Preferred Stk. Fund†					3					8					2								
Dividend Shares																							
Eaton & Howard Stock Fund																							
Fidelity Fund																							
First Mutual Trust Fund	5						5						60	28	15								
Fundamental Investors								150		32													
General Capital Corp.				5						2							38						
Incorporated Investors													430	450									
Institutional Shares								350					7	4									
Investment Co. of America																							
Investors Management Fund										10							6						
Keystone Custodian Funds																							
Series K-1, K-2, S-1, S-4†††						21	215#			71 1/2	288#	89			109		14		108			92	
Knickerbocker Fund			75				60						25										
Loomis-Sayles Second Fund																							
Low-Priced Shares—Group Securities		100	40				22						715	230	126		260						
Massachusetts Investors Trust						144																	
Mutual Investment Fund																							
National Securities—Low-Priced		100						20													25		
National Securities—Pfd. Stock					33															75		80	
National Securities—Speculative												35											
National Securities—Stock	55								30				48	39			4				79		
New England Fund																							
Republic Investors							10	10					5	5									
Selected American Shares								20															
Sovereign Investors													1										
State Street Investment Corp.					56																		
Union Common Stock Fund														10	12				13				
Union Preferred Stock Fund					26																		
CLOSED-END COMPANIES:																							
Adams Express																							
American European Securities													25										
American International Corp.													20										
Atlas Corp.§													25										
Blue Ridge Corp.											50												
Capital Administration																							
Chicago Corp.§	4					13																	
National Shares Corp.††											25		19										
Overseas Securities																							
Pacific American Investors§																							
Railway & Light Securities#																							
Selected Industries	20																						
Tri-Continental Corp.	37					55						10											
	19				62							10											
SPECIALTY FUNDS:																							
Railroad—Group Securities	22	40	10				95	20				45	45		12						30	31	
Railroad—New York Stocks		85					71	67				28	27			8					20		

† Holdings reported on July 31, 1948.
 ‡ Holdings reported on June 30, 1948.
 § Holdings reported on Oct. 15, 1948.
 ¶ Holdings reported on Aug. 31, 1948,
 unless otherwise indicated.
 # Formerly National Bond and Share.
 * Recent holdings in S-2 and S-3 not
 verified.



Left—Bolting joints with a power nut-runner as part of rail-laying operation on the Eagle Mountain Railroad—rail-laying crane in background. Right—One of 18 timber trestles on the new line. Note that bents are supported on concrete footings

BUILDS 52-MILE LINE IN 11 MONTHS

What is described as the longest privately owned standard-gage railroad to be constructed in the United States since 1918 was placed in full operation on November 9, together with the iron ore mine which it was built to serve. A project of the Kaiser Company and built at a cost of \$3,800,000, the new line is 52 mi. in length and extends from a connection with the Southern Pacific at Ferrum, Cal., on the Salton Sea, in a generally northeasterly direction to the Kaiser Company's Eagle Mountain mine.

Constructed in 11 months, the new single-track line is 190 ft. below sea level at its terminus on the Salton Sea, from which elevation it climbs on a ruling grade of two per cent to a maximum elevation of 1,660 ft., before dropping again to an elevation of 1,395 ft. at the mine. The maximum grade against northbound (empty) movements is 2.15 per cent, compensated for curvature, on a 4-mi. "hill" near the northerly end. The maximum grade against southbound (loaded) movements is one per cent.

From an engineering standpoint the new line is of interest for various reasons, including its construction in desert country where temperatures reach 125 deg. F. and higher. Also it was necessary to contend with flash floods involving runoffs of as much as

20,000 cu. ft. per sec. Another problem was the necessity of constructing an artificial "waterway" opening at a location where the line crosses an aqueduct carrying water for the City of Los Angeles, and then installing a bridge to span this opening.

Short Route to Mill

The purpose of the new line is to provide an all-rail route for ore shipments originating at the Eagle Mountain mine and destined for shipment to the steel plant of the Kaiser Company at Fontana, Cal. Cars moving from the mine are transferred to the Southern Pacific at Ferrum, over which they then move 112 mi. to Fontana, a point near San Bernardino and about 45 mi. east of Los Angeles. This rail movement of 164 mi. is said to give the Kaiser steel mill one of the shortest hauls for its iron ore supply of any major steel plant in the country.

From its terminus on the Salton Sea the line follows the route of the old Butterfield stage route for about 31 mi. It spans the All-American canal, carrying irrigation water from the Colorado river, and cuts across grounds that were used during the war in training armored divisions of the U. S. Army.



Ore cars are loaded at the mine by a conveyor

Kaiser Company rushes new railroad into service in California, connecting with Southern Pacific, which provides a short route between Kaiser's Eagle Mountain ore mine and its steel plant at Fontana

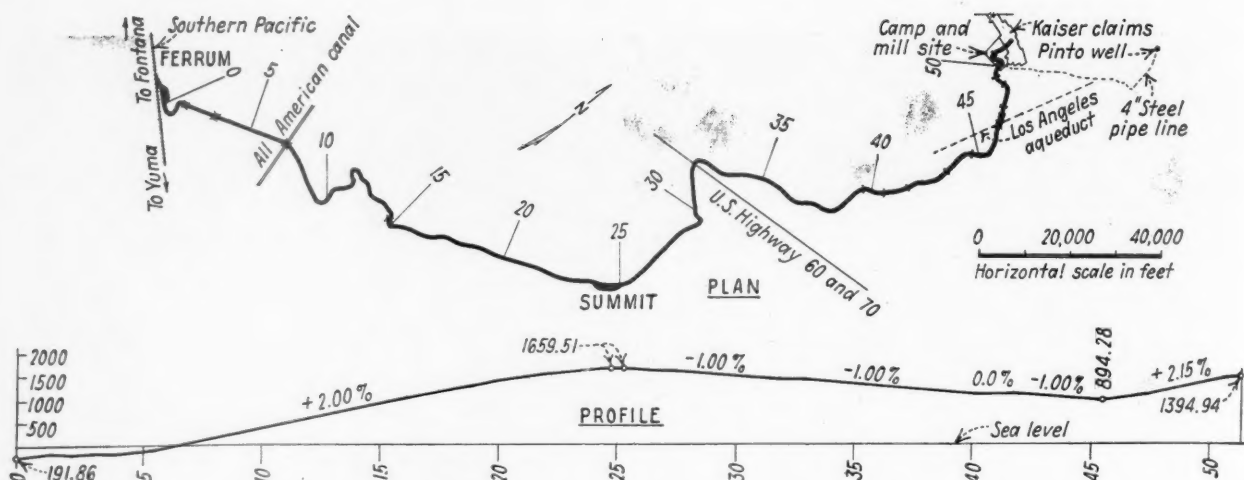
The northerly terminus of the line and the iron ore mine there are located on land forming part of the Joshua Trees National Monument.

The new line is constructed of 110-lb. rail purchased from the Southern Pacific, joined with four-hole angle bars. The rail is laid on creosoted timber ties, of which 147,000 were required. The ballast consists of rock and sand obtained along the right-of-way. The grading involved 2,000,000 cu. yd. of fill and about 600,000 cu. yd. of excavation, the fill material being moved into position with the aid of draglines and bulldozers. At a point known as Fitch Ridge a cut 80 ft. in depth had to be excavated, requiring the blasting and movement of 33,000 cu. yd. of solid rock.

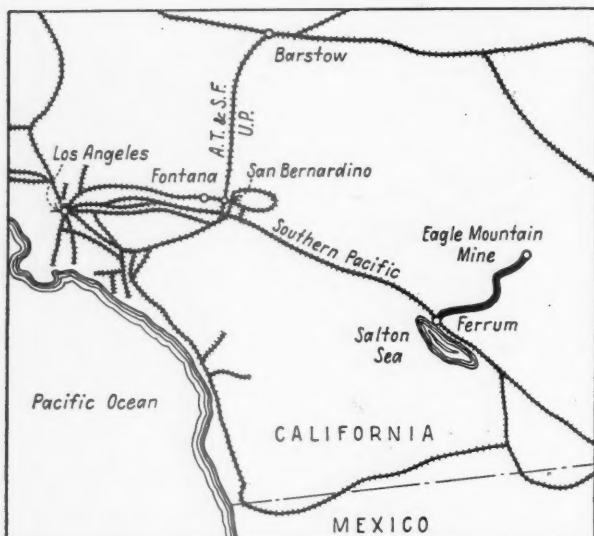
Special consideration was given to providing ample drainage and protection to handle the cloudbursts that occur frequently during the summer months in

the area traversed by the new line. The effect of the cloudbursts is enhanced by the barren mountain slopes in the vicinity, which shed water rapidly. Rainfalls of two or more inches in less than six hours are not unusual. An example of the conditions to be met is the fact that a bridge spanning a stream known as Salt creek had to be designed to carry 20,000 cu. ft. of water per second.

The first step in handling the problem of drainage was to make an aerial map of the entire district so that the drainage areas could be charted. On the basis of the information thus obtained dikes and channels were constructed, and a variety of different types of waterway openings were provided. The latter include 18 timber trestles and one structural steel bridge having a span of 66 ft. The latter structure carries the line over the Los Angeles aqueduct for which an opening was excavated. The longest trestle



* Condensed map and profile of the line, showing the terminus at Ferrum is nearly 200 ft. below sea level



The Eagle Mountain line's connection with the Kaiser Company steel plant at Fontana in relation to other railroads in Southern California

is one spanning Salt creek, which has 37 spans having a total length of 550 ft. The waterway openings also include 14,000 lin. ft. of corrugated metal culverts ranging in diameter from 30 in. to 72 in.

A Mile of Track a Day

A problem in roadbed stabilization was encountered at a point 1,200 ft. from the terminus of the line at Ferrum. At this location the elevation is 100 ft. below sea level and the roadbed passes over a bed of clay. As a result of marked subsidence at this point an investigation was made which divulged the fact that the instability was caused by ground water from the distant Chocolate mountains, which, being under a considerable hydraulic head, was pushing close to the surface. To overcome this difficulty the roadbed was excavated to a depth of 6 ft. below subgrade, and

after subsurface drains had been installed, the excavated area was backfilled with gravel.

In laying the track for the new line the ties were hauled from the junction at Ferrum and distributed by truck, considerably in advance of the rail-laying operation. As the rails were laid, using a track-mounted crane, they were partially spiked and held apart by track spreaders, thereby allowing the rail crane to proceed ahead of the finishing operations. The track was laid at the average rate of a mile a day. The trackage built includes about two miles of sidings, including four side tracks at the mine and one about midway of the line for the use of maintenance crews.

Aside from the track construction the project involved the installation of various types of auxiliary facilities. These include a locomotive repair shop, 36 ft. by 160 ft. in plan, a machine shop and a warehouse, all fabricated of structural steel and covered with aluminum sheathing. Camp dormitories with water, light and sewage systems were built at the mine site, three homes for permanent supervisory personnel were constructed, and necessary mining machinery was installed, including a crusher, loading conveyors and processing equipment. To furnish a water supply for the mine a 9-mi. pipe line was constructed from a source known as Pinto Well. This is a well 500 ft. deep in which the water stands at a level 80 ft. below the surface.

Engineering for the new line and supervision of the construction were in the hands of Kaiser Engineers, Inc.—E. T. Larson, chief product engineer; Frank Backman, general superintendent; and Ray Fullerton, resident engineer. The general contractor for the project was the J. F. Shea Company, Los Angeles, which company was the active participant in a joint venture with the General Construction Company, Seattle, Wash., and the Pacific Bridge Corporation, San Francisco, Cal. The survey of the line was undertaken in October, 1946, actual roadbed construction got under way in July, 1947, and the line was completed in June of this year.

"CEMENT CASE" RULING WILL BOOST PRICES OF RAILWAY SUPPLIES

***Such is belief of most manufacturers, but those who sell
f.o.b. now are less worried — All fear traffic decline***

Of 50 leading suppliers of railway equipment and supplies who have made known their opinions to *Railway Age*, 29 expect a harmful effect on their business, and hence to the railroads, from the ruling of the United States Supreme Court in the so-called "Cement Case"—which, as most manufacturers of heavy industrial products interpret it, forbids, "delivered" pricing and absorption of freight charges by producers. The remaining 21 either foresee no harmful effects, or are uncertain as to what the result may be—but most of them are apprehensive.

There are several ways in which manufacturers of railway materials expect strict f.o.b. pricing may prove injurious to them and to the railroads. Some items are furnished to the railroads by suppliers who serve a nationwide market from one or two plants—many of which have in the past quoted prices on a "delivered" basis. Such "one-plant" suppliers, generally speaking, are fearful lest f.o.b. pricing may regionalize their effective markets—limiting their sales to nearby purchasers, thus curtailing the volume of their production and increasing their unit costs. They believe that a trend in this direction will increase the selling price of their products to the railroads; and will curtail the opportunity of the railroads to select among competing producers.

Another consideration about which many suppliers are apprehensive is the fact that many of them fabricate semi-finished materials, e.g. steel; and the location of some of them at a distance from their supplies gives their competitors a cost advantage. Some of them believe, if f.o.b. pricing of steel continues, that fabricators at distant points will have to go out of business or move their plants closer to the steel mills. Either alternative will confront them with loss of capital value in their existing plants and will be injurious to the communities where they are now located and to their employees who have invested their savings in homes at their present locations. In either case, great economic waste is involved—which will have to be reflected in the price charged to railways which purchase their products.

There are, however, two general classes of suppliers who expect no immediately adverse effects from the "Cement Case" decision, viz., those who have always priced their products f.o.b., and those who produce high-value articles in the prices of which transportation cost is not a serious factor. Some such

producers are apparently of the opinion that the "Cement Case" doctrine does not apply to them, and that, even if it should, the result might not be disastrous with transportation cost such a small part of price at the point of consumption.

Several manufacturers believe that the clustering of fabricating plants near sources of supply, especially of steel, is inevitable if f.o.b. pricing is persisted in—and this trend they believe to be contrary to the public interest in the dispersion of industry for purposes of military defense.

With few exceptions, the manufacturers are seriously concerned with the effect of f.o.b. pricing on the volume of railroad traffic. They fear that this ruling will curtail railway traffic and revenues, and hence reduce the ability of the carriers to purchase equipment and supplies for the modernization and improvement of their service.

Opinions of Individual Suppliers

A car manufacturer says that the doctrine in the "Cement Case" will place his company "in a more difficult competitive position," because his plant is not located as near steel-producing areas as those of some of his competitors; "the new basis of pricing will increase our costs with a necessary cost increase to the railroad buyer."

The manufacturer of a widely used device of which there are only a limited number of suppliers, and who, for competitive reasons, has heretofore absorbed the rate differential between the point of origin and the basing-point, expects that application of the "Cement Case" doctrine will regionalize the market for his device; and will force his company to move its plant. The cost of this move will, ultimately at any rate, have to be reflected in higher prices for the device which this company sells to the railroads. Raw materials going into the production of this device have already increased in price, as a result of adoption of f.o.b. pricing by manufacturers—resulting in increased prices of the device to the railroads. This manufacturer expects that the expense of large-scale relocation of plants necessitated by application of f.o.b. pricing, and the loss of capital value in abandoned locations, will have a highly inflationary effect on a wide range of prices.

A track supply manufacturer reports that f.o.b.

pricing has already added to costs and limited available sources of supply. This practice, in his opinion, "will be harmful both to suppliers and users of railway materials."

Makes Car-Pricing More Difficult

The supplier of an item entering into the production of freight cars reports that, as a result of the court's decision in the "Cement Case," his company has "felt obliged to change our method of pricing from a delivered basis to an f.o.b. mill basis." When this device is sold to be installed in cars built at different plants, the added cost of the car with this item included will be different, depending on the location of the builder's plant. This situation "will make the quotation of car prices far more difficult than it was in the past."

A manufacturer in the motive power field expects that f.o.b. pricing "will inflict hardship on the railroads by ultimately restricting purchases from only those who are geographically favorably located." Another manufacturer in this field reports that the costs of its raw materials are not affected by the f.o.b. pricing of steel.

"Come a scarcity of business and an adequate supply of steel," f.o.b. pricing will "drive many companies out of business or reduce their local activities to a point which will inflict hardship on the people they have employed for many years"—such is the view of an Ohio manufacturer who produces a variety of devices in wide use, not only on the railroads but in other important industries. Because of volume production, this manufacturer has been able to "maintain low costs and low prices," and this situation is now threatened; "it is the most upsetting thing economically that could have been thought of."

Nationwide Markets Reduce Prices

The producer of an integral car part believes that "strict f.o.b. pricing will injure suppliers of railway materials, as well as inflict a hardship on the railroads." The greatest danger in this decision is that "the manufacturer loses a little more control in the overall operation of his business." Wider markets, spreading overhead over a larger number of units, brings lower prices to consumers, when the reduction in overhead per unit exceeds the freight rate per unit.

"We are a one-location company," writes a specialty manufacturer. "In order to meet competition, we have been equalizing freight for years. When inquiries come out we cannot afford to wait and see whether a railroad will give us an opportunity to meet a competitor's price. We simply have to put ourselves on an equal freight footing or the business in question is almost certain to be lost. It seems to us that the only type of company that stands to benefit from the decision in the 'Cement Case' is the very large company with plants in many locations and if our government is interested in keeping a large number of companies in business and keeping competition active, then it should not make decisions which favor the very large, many-location manufacturers."

A Middle Western producer of highly machined

products, with a resultant high per-pound value, reports f.o.b. pricing of materials entering into its products does not affect him as seriously as it does producers of less highly processed devices—nevertheless delivered pricing has enabled him to serve a nationwide market from one location, and he will henceforth be at a disadvantage with his competitors in major market areas.

A paint manufacturer believes that "f.o.b. pricing would increase prices to certain of the railroads and result in increasing their costs or in limiting their sources of supply." A producer of building materials expresses an identical opinion. A manufacturer of a standard and widely used railway device is, "fortunately for our company," located near to his raw materials. Nevertheless, he does purchase many items from distant points and he is "disturbed about the situation," because he fears the result will be higher costs and higher selling prices.

New England and the Mid-West

A New England producer—who in the past has absorbed some freight, particularly to distant points, "in the interest of simplification of our pricing structure" writes that he "cannot think of anything good to say" for enforced f.o.b. pricing "either from the angle of our customers or ourselves."

A Middle Western supplier of a material entering into car construction—who has ordinarily followed f.o.b. pricing—has, nevertheless, modified this practice to the extent necessary to avoid penalizing competing carbuilders. "This practice must now, of course, be discontinued," he writes, "and will result in some increased cost to those builders located at a greater distance."

A Middle Western supplier of heavy machinery who sells "the majority" of his products to the railroads "on a strict f.o.b. basis," believes his raw materials are going to cost him more and this increase will have to be passed along to consumers. Furthermore, this manufacturer believes the "Cement Case" decision will "centralize vital plants near steel-producing centers"—an undesirable development from the standpoint of national defense.

A company which supplies a widely used product from regional sources of production says that, on his own business, "strict f.o.b. pricing would have little effect, and this applies also to our competitors and the railroads." Nevertheless, this manufacturer believes that the situation of "one-plant suppliers" is quite different, where the "Cement Case" doctrine will "eliminate competition and, without doubt, raise prices." He opposes measures which reduce competition and "regulation which interferes with or limits the American way of life."

A carbuilder believes the "Cement Case" doctrine is inconsistent unless applied to all commodities—including "chewing gum and everyday items of food and wearing apparel"—and applying the ruling to all articles of commerce "would produce chaos."

A Michigan manufacturer reports that "it will be necessary for us to base our price on the longest haul of steel we are likely to buy, because of our inability to know exactly where the steel is coming from when

we quote a price." The decision seems "to have more than one interpretation"—writes a manufacturer of heavy tools: "If it is literally adhered to, it would increase our difficulties of doing business in certain localities." A wood-preserver gives as his opinion that "strict f.o.b. pricing is going to injure the suppliers of railway materials and thus inflict a hardship on the railroads."

Traffic Loss the Principal Harm

A producer of steel castings reports that f.o.b. pricing "would injure at least some suppliers of railway material." Four producers of iron and steel are in substantial agreement that this pricing will limit the railroads' sources of supply, will tend to raise prices, and will affect the steel industry adversely. Two other steel producers believe the direct adverse effects on the price of railway supplies are of small consequence, compared to the "substantial loss of traffic" the railroads will sustain from elimination of cross-haul of steel from competing mills. A producer of specialized steel products reports that f.o.b. pricing will raise prices on some of its output, but not on all.

Three manufacturers of machine tools, at widely separated points, see no immediate effect of the "Cement Case" decision on the price of their products to the railroads, since all three have followed f.o.b. pricing for many years. Three suppliers of products which go into electrical construction make an identical report. Three manufacturers of rubber and insulating products hold a similar opinion. A supplier of maintenance-of-way equipment writes that "at the moment, there does not seem to be much possibility of great difficulties being presented." A producer of locomotive specialties and other products sold to industries other than railroads is not particularly apprehensive from the point of view of his immediate interest, since he ships f.o.b. anyhow, but he is fearful of the effect of the practice on the volume of railroad traffic. A decentralized industry, producing a widely used product entering into freight car construction, does not foresee "any appreciable increase" from the "Cement Case" decision in the price it charges the railroads—but it also has misgivings as to the effect of the decision on the volume of freight traffic.

A manufacturer of track supplies, who sells f.o.b. and whose production is decentralized, reports that the "Cement Case" has "fortunately left us unaffected"—but, he adds, "I have no doubt that in the long run the change from the multiple-point basing system will inflict a hardship on the railroads and the suppliers in respect to future prices. I sincerely hope the 81st Congress will take positive action which will favorably resolve this difficulty for all concerned."

Two manufacturers of bearings, while not altogether certain as to the effect of the "Cement Case" decision on their business, have not so far noted any adverse effects—but one of them adds that "we feel that the decision in the Cement Case was wrong and that action should be taken to make it possible for the steel mills to price on the old basis." A producer of high-value portable tools, who sells on

a freight-allowed basis, does not see that the "Cement Case" ruling affects its situation.

The producer of a non-ferrous metal does not "feel that as a whole there will be much difference in price, or injury, to the manufacturer of railway supplies" from the application of f.o.b. pricing because "the greater number of large producers" are located "within relatively short distance" of their raw materials. A manufacturer of widely used railway supplies, with all his plants located near steel sources, reports that "we do not anticipate any harmful effects so far as our own operations are concerned." A maker of lightweight, high-valued devices (including tool and die work), who has done his pricing f.o.b., is establishing warehouse facilities and plans to price f.o.b. from these warehouses, believing this practice can be continued so he will not be forced to regionalize actual production.

One petroleum producer reports that his prices are based on refinery shipping points plus freight and the "Cement Case" will not affect this situation. Another petroleum producer says "the question is so complicated and so many factors are involved that, frankly, we don't know what the answer will be."



B. & B. forces widened the waterway opening of this bridge without interruption to traffic. It was part of an extensive flood program carried out in Iowa

1948 RAILWAY PURCHASES*

	September (000)	Nine Month Totals 1948 (000)	Nine Month Totals 1947 (000)
Equipment**	\$8,026	\$511,931	\$460,704
Rail	8,942	69,356	64,429
Crossties	9,208	61,183	73,705
Other Material	102,728	899,221	773,888
Total from Manufacturers	\$128,904	\$1,541,691	\$1,372,726
Fuel	66,950	625,967	492,017
Grand Total	195,854	\$2,167,658	\$1,864,743

* Subject to revision

**Amount placed on order

RAILWAY BUYING CONTINUES AT HIGH RATE

Purchases of materials and supplies, plus equipment orders, by the Class I railroads during the first 9 months of 1948 have reached the figure of \$2,167,658,000. This represents an increase of more than 16 per cent over last year's corresponding total of \$1,864,743,000. Buying from manufacturers, including equipment orders, has been good for a considerable part of this rise, that figure having gone up 12.3 per cent

SEPTEMBER* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$62,834	+92	Jan.	\$105,827	+14	1942	\$649,490	+59
1943	83,209	+45	Feb.	103,390	+17	1943	622,403	+65
1944	89,296	+35	Mar.	121,557	— 1	1944	771,887	+33
1945	85,813	+41	Apr.	115,904	+ 4	1945	743,823	+38
1946	95,861	+26	May	108,914	+11	1946	729,892	+41
1947	96,102	+26	June	118,106	+ 2	1947	912,022	+13
1948	120,878		July	114,442	+ 6	1948	1,029,760	
			Aug.	120,742	—			
			Sept.	120,878				

SEPTEMBER* PURCHASES OF RAIL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$3,620	+147	Jan.	\$7,409	+21	1942	\$42,752	+62
1943	5,613	+ 59	Feb.	8,200	+ 9	1943	41,574	+67
1944	5,647	+ 58	Mar.	8,661	+ 3	1944	56,860	+22
1945	7,691	+ 16	Apr.	5,431	+65	1945	56,316	+23
1946	7,220	+ 24	May	6,716	+33	1946	43,720	+59
1947	7,121	+ 26	June	7,803	+15	1947	64,429	+ 8
1948	8,942		July	7,012	+28	1948	69,356	
			Aug.	9,182	— 3			
			Sept.	8,942				

SEPTEMBER* PURCHASES OF CROSSTIES

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$5,127	+80	Jan.	\$5,623	+64	1942	\$50,640	+21
1943	9,032	+ 2	Feb.	4,630	+99	1943	59,995	+ 2
1944	7,866	+17	Mar.	5,861	+57	1944	65,557	— 7
1945	7,081	+30	Apr.	5,933	+55	1945	54,322	+13
1946	7,608	+21	May	6,129	+50	1946	66,068	— 7
1947	7,313	+26	June	7,028	+31	1947	73,705	—17
1948	9,208		July	7,611	+21	1948	61,183	
			Aug.	9,160	+ 1			
			Sept.	9,208				

SEPTEMBER* PURCHASES OF OTHER MATERIAL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$54,087	+90	Jan.	\$92,795	+11	1942	\$556,098	+62
1943	68,564	+50	Feb.	90,560	+13	1943	520,834	+73
1944	75,783	+36	Mar.	107,035	— 4	1944	649,470	+38
1945	71,041	+45	Apr.	104,540	— 2	1945	633,185	+42
1946	81,033	+27	May	96,069	+ 7	1946	620,104	+45
1947	81,668	+26	June	103,275	— 1	1947	773,888	+16
1948	102,728		July	99,819	+ 3	1948	899,221	
			Aug.	102,400	—			
			Sept.	102,728				

*Subject to revision

from the same period in 1947. Fuel purchases, which are 27 per cent greater this year, are contributing slightly more than their share to the overall increase.

Equipment orders in the month of September were rather light in comparison to earlier months. The total

for the month was approximately \$8,026,000. Represented in this figure are an estimated \$3,360,000 for 840 freight cars, \$700,000 for 70 passenger-train cars and for 35 Diesel-electric locomotives approximately \$3,966,000.

SEPTEMBER* PURCHASES OF FUEL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$36,318	+84	Jan.	\$73,733	-9	1942	\$311,026	+101
1943	45,702	+46	Feb.	70,438	-5	1943	396,901	+58
1944	43,977	+52	Mar.	69,181	-3	1944	445,374	+41
1945	44,325	+51	Apr.	58,478	+14	1945	418,943	+49
1946	51,148	+31	May	73,232	-9	1946	405,916	+54
1947	56,172	+19	June	74,586	-10	1947	492,017	+27
1948	66,950		July	68,257	-2	1948	625,967	
			Aug.	71,112	-6			
			Sept.	66,950				

SEPTEMBER* TOTAL PURCHASES (Excl. Equip.)

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)			Nine Month Totals '48 And Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1942	\$99,152	+89	Jan.	\$179,560	+5	1942	\$960,516	+72
1943	128,911	+46	Feb.	173,828	+8	1943	1,019,304	+62
1944	133,273	+40	Mar.	190,738	-2	1944	1,217,261	+36
1945	130,138	+44	Apr.	174,382	+8	1945	1,162,766	+42
1946	147,009	+28	May	182,146	+3	1946	1,135,808	+46
1947	152,274	+23	June	192,692	-3	1947	1,404,039	+18
1948	187,828		July	182,699	+3	1948	1,655,727	
			Aug.	191,854	-2			
			Sept.	187,828				

SEPTEMBER* INVENTORIES OF RAIL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$21,622	+49	Jan. 1	\$32,924	-2
1943	19,558	+65	Feb.	36,120	-11
1944	22,324	+44	Mar.	37,341	-14
1945	25,611	+26	Apr.	36,572	-12
1946	25,192	+28	May	31,911	+1
1947	29,766	+8	June	30,767	+5
1948	32,212		July	30,837	+4
			Aug.	30,005	+7
			Sept.	32,212	

SEPTEMBER* INVENTORIES OF SCRAP

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$9,609	+66	Jan. 1	\$13,225	+20
1943	8,607	+85	Feb.	13,336	+19
1944	10,292	+55	Mar.	16,409	-3
1945	13,979	+14	Apr.	15,783	+1
1946	11,546	+38	May	16,217	-2
1947	9,978	+60	June	13,993	+14
1948	15,927		July	14,210	+12
			Aug.	14,857	+7
			Sept.	15,927	

SEPTEMBER* INVENTORIES OF CROSSTIES

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$55,800	+40	Jan. 1	\$92,300	-15
1943	59,185	+32	Feb.	93,492	-16
1944	71,306	+10	Mar.	98,843	-21
1945	62,070	+26	Apr.	96,782	-19
1946	74,454	+5	May	92,711	-16
1947	83,771	-7	June	86,548	-10
1948	78,309		July	82,143	-5
			Aug.	77,952	+1
			Sept.	78,309	

SEPTEMBER* INVENTORIES OF FUEL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$50,434	+82	Jan. 1	\$66,388	+38
1943	61,204	+50	Feb.	66,727	+38
1944	67,538	+34	Mar.	65,071	+41
1945	55,333	+66	Apr.	64,153	+43
1946	51,944	+77	May	62,094	+48
1947	63,026	+46	June	72,512	+27
1948	91,850		July	83,946	+9
			Aug.	86,636	+6
			Sept.	91,850	

SEPTEMBER* INVENTORIES OF OTHER MATERIAL

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$392,513	+56	Jan. 1	\$560,703	+9
1943	376,180	+63	Feb.	570,201	+7
1944	427,277	+43	Mar.	577,078	+6
1945	448,110	+37	Apr.	587,390	+4
1946	464,973	+32	May	603,972	+1
1947	555,498	+10	June	607,278	+1
1948	611,861		July	610,025	-
			Aug.	614,271	-1
			Sept.	611,861	

* Subject to revision.

SEPTEMBER* TOTAL INVENTORIES

Sept. '48 Compared to Other Septs. (000)			Sept. '48 Compared to Other Months '48 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1942	\$529,978	+57	Jan. 1	\$765,540	+8
1943	524,734	+58	Feb.	779,876	+6
1944	598,737	+39	Mar.	794,742	+4
1945	605,103	+37	Apr.	800,680	+4
1946	628,109	+32	May	806,905	+3
1947	742,039	+12	June	811,098	+2
1948	830,159		July	821,161	+1
			Aug.	823,721	+1
			Sept.	830,159	

GENERAL NEWS

Hear A.A.R. and Labor On Basing-Point Ruling

**Parmelee, Kelly, Fraser testify
before Capehart committee**

Dr. Julius H. Parmelee, vice-president of the Association of American Railroads and director of its Bureau of Railway Economics, this week told the Senate Trade Practices Committee that the railroads would be weakened financially and ultimately physically, if pricing policies required by the Federal Trade Commission's basing-point orders should prevail generally. Dr. Parmelee appeared along with A.A.R. Traffic Officer Walter J. Kelly and H. W. Fraser, president of the Order of Railway Conductors and chairman of the Railway Labor Executives' Association, at the December 7 session of hearings in connection with the committee's investigation of the prospective impact of the Supreme Court's April 26 decision upholding the F.T.C.'s "cease and desist" order against the cement industry's basing-point system of pricing.

Mr. Kelly's presentation pointed out how the policy of the Interstate Commerce Act, as administered by the Interstate Commerce Commission, has for years encouraged and promoted free movement of goods on a nationwide basis. While making some comment of his own, Mr. Fraser also expressed his agreement with the testimony offered by the A.A.R. officers, saying that he knew "their broad technical and practical knowledge of railroad operating problems," and that he had "the utmost confidence in their statements as to the effect of the basing point order . . . if that order becomes a permanent factor in the production and distribution of goods."

The committee, headed by Senator Capehart, Republican of Indiana, is a subcommittee of the Senate committee on interstate and foreign commerce. On the day before Messrs. Parmelee, Kelly and Fraser appeared, Senator Capehart and Chairman Freer of the F.T.C. issued a joint statement saying that they had discussed, "at considerable length and in a most friendly fashion," the problem under consideration by the committee.

Possibility of Joint Action

"We all believe," the statement continued, "that fears of business should be eliminated wherever possible. The Senate committee and the commission

think there is a reasonable possibility that by joint action of the committee and the commission these fears and the prevailing confusion may be satisfactorily eliminated. The committee has appointed a representative and the commission will appoint a representative to meet and endeavor to determine the points of agreement and the points of disagreement with a view to working out a clarification of the problem."

Dr. Parmelee's prediction that general application of the F.T.C. order would affect the railroads adversely was based on his findings that the required

SAYS HIGHER RATES WILL ENCOURAGE NATIONALIZATION, SEAWAY PROJECT

A prominent member of the National Industrial Traffic League last week charged the railroads with "overpricing their services," asserting that the tendency toward spiraling prices is leading the carriers toward government ownership and paving the way for construction of the St. Lawrence Seaway. The speaker was A. J. Kelley, chairman of the Export-Import committee of the N.I.T.L., and treasurer of D. C. Andrews Company, Chicago, who expressed his opinions at a luncheon meeting of the Chicago chapter of the Interstate Commerce Commission practitioners on December 3.

Mr. Kelley predicted grave consequences should transportation be nationalized. As an example, he said that a "tough" railroad traffic officer can usually help solve a shipper's problem, whereas under government ownership a shipper would have to deal with "politicians who don't know a railroad track from a smoke-stack, and care less."

The speaker cited examples of traffic diversion from the railroads to competing forms of transport, declaring that increased rail rates are forcing the shippers "to look elsewhere." Although the railroads are opponents of the St. Lawrence Seaway, they are "helping to put it in" by overpricing their services, he said.

Mr. Kelley reiterated his charge, noted first in the *Railway Age* of September 25, page 79, that the railroads are "scraping the bottom of the barrel" for accessory charges by proposing a new port handling charge of six cents per 100 lb. on all export, import, coastwise and inter-coastal traffic moving through Atlantic and Gulf ports. He urged again that the carriers' nation-wide advertising campaign be employed to "get over to labor what it is doing to itself" by continued requests for wage boosts.

pricing policies would "restrict competition, hamper the free flow of commodities throughout the country, adversely affect the volume of production, and otherwise injure the national economy." Free competition among producers and distributors of the United States, he said, "is one of the policies that has made our nation industrially strong and great. No artificial restriction should be laid upon that fundamental policy unless it is clearly demonstrated to be in the public interest."

Would Dry Up Traffic Sources

The effect of the basing-point decisions upon the railroads, the A.A.R. vice-president stated, would be the drying up of important sources of traffic and the diversion of traffic to other forms of transportation. "Such traffic and revenue losses," he said, "would weaken the railroads by aggravating an already serious financial situation with which they are now struggling."

Pointing out that the reduction in the flow of commerce which would result from the general application of the policy of the basing-point decisions is due to several factors, Dr. Parmelee continued:

"The first of these factors is the limitation imposed upon the competitive areas of individual producers and plants. An expectable effect would be to set up around each plant or producing center a monopoly area within which that plant or producing center would have a price advantage by reason of lower transportation charges resulting from proximity—an advantage which producers in other areas would not be permitted to overcome by freight absorptions.

"This would have a double effect. It would prevent or restrict shipments into an area from other and more distant but previously competitive locations. At the same time, it would prevent or impede the local producer in any effort to expand his market and thereby increase his output. Both effects would be harmful to consumers, to producers and to the whole system of broad and competitive markets upon which our economy is built."

A secondary adverse effect of this localization of production, Dr. Parmelee said, would be localization of traffic movement. This might be offset in certain instances by longer average hauls for the raw materials involved, he added, but "on the whole, the result so far as the total flow of goods is concerned is likely to be a net loss."

Calling the Congressional subcommittee's attention to the fact that the

low freight rates on the railroads have been due largely to mass transportation operations and long hauls, Dr. Parmelee maintained that "any substantial shortening of rail hauls, even if no other change should take place in railroad operations, would tend to increase the unit cost of moving freight, with consequent increases in freight rates."

If the railroads lose traffic and revenue because of the effect of the basing-point decisions, the A.A.R. officer warned, they will be forced to retrench, and this would mean a reduction in railroad employment and in railroad purchases.

Declaring that "the great advantage we had over our enemies in the last war was our gigantic and versatile mass-production industrial system, combined with the ability of the railroads to transport speedily and surely the vast quantities of raw and manufactured materials needed for modern warfare," Dr. Parmelee asked: "Is it good judgment to sacrifice that advantage by disrupting our economy and weakening the railroads when we know that we would have desperate need of their maximum capacity in any future emergency?"

Mr. Kelly cited several I.C.C. decisions upholding the principle that as the distance increases, the rate per ton-mile decreases. "This principle," Mr. Kelly continued, "rests not only on the fact that as distance increases, the influence of high terminal costs at points of origin and destination thins out, but also more particularly on a recognition of the desirability of establishing rates on a basis which will enable producers located at points distant from the principal markets to compete with producers located nearer such markets, thus encouraging nationwide competition and stimulating the movement of traffic."

Dislocation of Industry

The A.A.R. traffic officer declared that "unless this principle is adhered to generally, long-haul movements will disappear, resulting in dislocation of industry and adversely affecting the development of the nation."

Among the I.C.C. decisions to which Mr. Kelly called attention were those affecting rates on sugar. The rate adjustment prescribed by the commission in these cases, he stated, was designed to enable producers, refiners and manufacturers in all territories to compete in the important central western markets. "The beet sugar industry," he said, "could not long survive if restricted in the sale of its sugar to its own thinly populated area, which consumes only a small fraction of the total production."

A similar situation exists with respect to rates on such commodities as salt, fresh fruits and vegetables, grain and grain products, coal, and lumber, Mr. Kelly pointed out.

He also referred to cross-hauling,

noting that an inquiry into the matter was part of the investigation of the national defense program conducted by a former Senate subcommittee headed by President Truman when he was a member of the Senate. Mr. Kelly quoted this "Truman Committee" conclusion that "the detriment and shock to our domestic economy and distribution and marketing system would, as to many items, outweigh the transportation savings resulting from the elimination of cross-hauling."

Fraser Fears "Displaced Persons Problem"

Mr. Fraser quoted the testimony of previous witnesses before the committee to indicate the potential effect of the F.T.C. policy on various communities, including Cedar Rapids, Iowa, where the O.R.C. maintains its national headquarters. "It seems to me," he said, "that if we have to live with the idea set down in the Federal Trade Commission order, we will create our own uprooted or displaced persons problem."

Recalling the wartime performance of the railroads and noting the carriers' importance to the national economy, Mr. Fraser asked: "Why should we now adopt a policy which will, inescapably I think, reduce the efficiency of the carriers by putting them on an ill-advised short-haul basis in substantial areas of the country?" In closing, he urged upon the committee "the logic of recommending Congressional action legalizing the continuance of absorption of freight charges by all producers in the same voluntary manner that this has been done throughout our industrial history."

"Crippling Blow" to Forwarders

Among those testifying in hearings conducted last week, Giles Morrow, executive secretary and general counsel of the Freight Forwarders Institute, declared that, with respect to the cement decision and the other cases involved, members of the freight forwarding industry are forced largely into a "field of speculation" because "we do not know what the decisions mean in the terms of their possible effect and future regulations." The confusion which those decisions and the varying interpretations thereof have caused, he said, is not healthy for the country and should be "definitely and finally cleared up" as soon as possible.

Mr. Morrow said that the freight forwarding industry will suffer a "crippling blow" if, as many seem to believe, the whole system of absorption of freight charges in order to reach competitive markets is, in and of itself, unlawful. "We cannot believe that this is the meaning or intent of the law," he added, "but if it is we think the law should be changed. If this is not the intent of the law, clarification is needed to put an end to uncertainty and let American business know what pricing policies are lawful."

Mr. Morrow said that freight forwarders have no means of determining precisely what portion of the goods they carry reach markets by reason of freight absorption, but they have enough information "to know that it is a very large amount" and that it runs practically the "whole range" of less-than-carload commodities. A check made by one forwarder to determine the proportion of prepaid shipments to total shipments, Mr. Morrow said, showed that 38 per cent of his total transportation charges were prepaid. "This may not be typical," Mr. Morrow commented, "but it is illustrative. In addition, it has been brought out . . . before the Interstate Commerce Commission that there is a large but undetermined amount of freight moving on a so-called freight allow basis. That is, the shipments move collect but the consignee deducts freight charges from the invoice price of the goods under his purchase contract."

Mr. Morrow also told the committee that a feature of forwarder service of "particular pertinence" from the standpoint of the present inquiry is the length of their hauls, which, he said, average about 850 miles. "This is due," he said, "to the fact that the economies inherent in the concentration of traffic and the more efficient methods of handling are much more pronounced in longer than in shorter hauls. Thus, anything which tends to restrict market areas will, of course, lessen the field of usefulness of the freight forwarder and have an adverse effect on the industry."

10 Months' Net Income Totalled \$590,000,000

Net railway operating income for the same period was \$853,624,669

Class I railroads in the first 10 months of 1948 had an estimated net income, after interest and rentals, of \$590,000,000, as compared with \$370,000,000 in the corresponding period of 1947, according to the Bureau of Railway Economics of the Association of American Railroads. The 10-months' net railway operating income, before interest and rentals, was \$853,624,669, as compared with \$636,732,695.

Estimated results for October showed a net income of \$85,000,000, as compared with \$50,000,000 for October, 1947, while the net railway operating income for the 1948 month was \$110,876,857, as compared with \$76,879,447 for October, 1947. In the 12 months ended with October, the rate of return averaged 4.21 per cent, as compared with 3.57 per cent for the 12 months ended with October, 1947.

Gross in the 10 months amounted

to \$8,039,696,497, compared with \$7,126,451,208 in the same period of 1947, an increase of 12.8 per cent. Operating expenses amounted to \$6,185,340,861, compared with \$5,572,138,491, an increase of 11 per cent. Twenty-one class I roads failed to earn interest and rentals in the 10 months, of which eight were in the Eastern district, three in the Southern region and 10 in the Western district.

Net Higher in East

Class I roads in the Eastern district in the 10 months had an estimated net income of \$224,000,000, compared with a net income of \$119,000,000 in the same period of 1947. For October, their estimated net income was \$35,000,000, compared with net income of \$15,000,000 in October, 1947.

The same roads in the 10 months had a net railway operating income of \$368,033,110, compared with \$252,948,935 in the same period of 1947. Their net railway operating income in October amounted to \$49,367,865, compared with \$27,892,558 in October, 1947.

Gross in the Eastern district in the 10 months totaled \$3,667,101,107, an increase of 12.7 per cent compared with the same period of 1947, while operating expenses totaled \$2,886,580,749, an increase of 10.2 per cent.

South Also Gains

Class I roads in the Southern region in the 10 months had an estimated net income of \$81,000,000, compared with a net income of \$43,000,000 in the same period of 1947. For October, they had an estimated net income of \$8,000,000 compared with a net income of \$4,000,000 in October, 1947.

The same roads in the 10 months had a net railway operating income of \$115,789,277, compared with \$80,552,569 in the same period of 1947. Their net railway operating income in October amounted to \$11,083,061, compared with \$7,845,488 in October, 1947.

Gross in the Southern region in the 10 months totaled \$1,095,881,368, an increase of 11.9 per cent compared with the same period of 1947, while operating expenses totaled \$851,980,206, an increase of 9 per cent.

Increases Smaller in West

Class I roads in the Western district in the 10 months had an estimated net income of \$285,000,000, compared with \$208,000,000 in the same period of 1947. For October, they had an estimated net income of \$42,000,000, compared with a net income of \$31,000,000 in October, 1947.

The same roads in the 10 months had a net railway operating income of \$369,802,282, compared with \$303,231,191 in the same period of 1947. Their net railway operating income in October amounted to \$50,425,931, compared with \$41,141,401 in October, 1947.

Gross in the Western district in the 10 months totaled \$3,276,714,022, an in-

crease of 13.3 per cent compared with the same period of 1947, while operating expenses totaled \$2,446,779,906, an increase of 12.8 per cent.

CLASS I RAILROADS — UNITED STATES		
	Month of October	
	1948	1947
Total operating revenues	\$878,120,864	\$794,810,558
Total operating expenses	651,909,449	612,031,487
Operating ratio		
—per cent	74.24	77.00
Taxes	100,778,745	89,504,780
Net railway operating income (Earnings before charges)	110,876,857	76,879,447
Net income, after charges (estimated)	85,000,000	50,000,000
Ten Months Ended October 31, 1948		
Total operating revenues	\$8,039,696,497	\$7,126,451,208
Total operating expenses	6,185,340,861	5,572,138,491
Operating ratio		
—per cent	76.94	78.19
Taxes	856,620,934	776,627,337
Net railway operating income (Earnings before charges)	853,624,669	636,732,695
Net income, after charges (estimated)	590,000,000	370,000,000

A.S.M.E. Railroad Division Installs New Officers

In conjunction with the annual meeting of the American Society of Mechanical Engineers, held at New York November 28 to December 3, the Railroad division conducted two all-day technical sessions, at the close of which the following members of the executive committee were installed for 1949: B. S. Cain, assistant engineer, locomotive division, General Electric Company, Erie, Pa., chairman; J. M. Nicholson, director of research, Atchison, Topeka

& Santa Fe, Chicago; E. D. Campbell, consultant, American Car & Foundry Co., New York; K. A. Browne, research consultant, Chesapeake & Ohio, Cleveland, Ohio; C. H. Beck, vice-president, Westinghouse Air Brake Company, Wilmerding, Pa., and E. L. Woodward, western mechanical editor, *Railway Age*, Chicago, secretary. Three incoming new members of the general committee included E. R. Battley, chief of motive power and car equipment, Canadian National, Montreal, Que.; J. D. Loftis, chief of motive power and equipment, Atlantic Coast Line, Wilmington, N. C., and E. M. Van Winkle, vice-president, American Steel Foundries, New York.

During the division luncheon on December 2, the following members were elevated to the grade of Fellow in the Society: Karl Howard, vice-president, General Steel Castings Corporation, Eddystone, Pa.; E. S. Pearce, president, Railway Service & Supply Corp., Indianapolis, Ind.; Ellis W. Test, assistant to president, Pullman-Standard Car Manufacturing Company, Chicago; C. K. Steins, mechanical engineer, Pennsylvania, Philadelphia, Pa.; A. A. Raymond, superintendent fuel and locomotive performance, New York Central, Buffalo, N. Y., and Leigh Budwell, chief mechanical officer, Richmond, Fredericksburg & Potomac, Richmond, Va.

Approximately 300 railroad and railroad supply men attended the several sessions of the division, where a number of technical papers dealing with motive power and car equipment design and maintenance were presented.

Most of the railroad meetings were held on December 2 and 3, and during those sessions the following reports were presented and discussed: Progress in Railway Mechanical Engineering; Locomotive Proportions and Transmission Systems; Symposium on Non-Destructive Testing of Parts and Assemblies from Motive Power and Rolling Stock; Symposium on Press Fits in connection with railway car, wheels and axles and locomotive parts; Braking Problems and Journal Bearings for High Speed Freight Service.

In addition, two papers were presented at the session on December 2. One of these, entitled "Technical Considerations Leading to the Establishment of High Speed Freight Service and Related Operating Problems," appears elsewhere in this issue. The other dealt with protection of lading and equipment.

Analyst Looks at K.C.S.

Close personal supervision, heavy ownership interest by management, Dieselization and smart operating, plus inherent natural advantages, have made the Kansas City Southern "the outstanding performer of the year," according to David A. Hill, consultant on railroad securities, at a lecture to

FEDERAL AID TO CHICAGO AIRPORT RAISED TO TOTAL OF \$4,375,000

Federal financial aid for construction of the Chicago Orchard (Douglas) airport now totals \$4,375,000, and the city of Chicago, sponsor of the project, has allocated an additional \$9,375,000 for its share of the work. These figures were supplied by Administrator Rentzel of the Civil Aeronautics Administration in a December 7 statement which listed a "grant offer" of \$1,775,000 to the Chicago project as the largest of 39 such "offers" during the month ended November 15 under the Federal Aid Airport Program. A previous grant of \$2,600,000 had been made for the Chicago project.

The month's 39 "offers" involved an aggregate of \$3,804,532. They raised the total number of "grant offers" to date to 590, and the aggregate federal government commitments under the program to \$61,808,641.

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways
(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

Income Items	United States			
	For month of August 1948	1947	For the eight months of 1948	1947
1. Net railway operating income.....	\$115,709,718	\$81,145,528	\$631,899,245	\$511,538,517
2. Other income.....	14,589,923	14,252,802	141,964,443	129,299,369
3. Total income.....	130,299,641	95,398,330	773,863,688	640,837,883
4. Miscellaneous deductions from income	4,749,457	3,447,157	43,856,784	28,419,881
5. Income available for fixed charges	125,550,184	91,951,173	730,006,904	612,418,002
6. Fixed charges:				
6-01. Rent for leased roads and equipment.....	11,409,716	10,670,598	87,664,188	81,807,179
6-02. Interest deductions ¹	25,021,315	25,611,335	193,296,561	207,926,983
6-03. Other deductions.....	168,256	157,480	1,198,190	1,179,711
6-04. Total fixed charges.....	36,599,287	36,439,413	282,158,939	290,913,873
7. Income after fixed charges.....	88,950,897	55,511,760	447,847,965	321,504,129
8. Other deductions.....	3,441,064	2,867,705	25,944,257	22,999,943
9. Net income.....	85,509,833	52,644,055	421,903,708	298,504,186
10. Depreciation (Way and structures and Equipment).....	31,547,870	29,586,632	246,445,572	234,353,116
11. Amortization of defense projects.....	1,380,987	1,354,569	11,278,843	10,827,566
12. Federal income taxes.....	50,913,666	30,738,444	271,671,271	196,160,735
13. Dividend appropriations:				
13-01. On common stock.....	21,621,964	17,280,446	107,084,027	91,331,244
13-02. On preferred stock.....	4,316,935	4,318,989	39,275,816	27,929,300
Ratio of income to fixed charges (Item 5 ÷ 6-04).....	3.43	2.52	2.59	2.11
Selected Expenditures and Asset Items				
17. Expenditures (gross) for additions and betterments—Road.....			\$207,967,318	\$173,097,433
18. Expenditures (gross) for additions and betterments—Equipment.....			553,824,299	317,282,552
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707).....			540,187,566	566,793,028
20. Other unadjusted debits.....			144,813,613	186,205,146
21. Cash.....			994,098,879	1,028,956,352
22. Temporary cash investments.....			987,328,672	981,108,990
23. Special deposits.....			114,247,465	131,141,616
24. Loans and bills receivable.....			12,816,781	11,399,034
25. Traffic and car-service balances—Dr.....			57,208,927	47,538,952
26. Net balance receivable from agents and conductors.....			141,300,099	125,251,380
27. Miscellaneous accounts receivable.....			351,717,068	280,531,863
28. Materials and supplies.....			830,159,347	742,870,900
29. Interest and dividends receivable.....			17,254,220	17,168,224
30. Accrued accounts receivable.....			188,308,430	167,053,102
31. Other current assets.....			38,857,742	34,235,096
32. Total current assets (items 21 to 31).....			3,733,297,630	3,567,255,509
40. Funded debt maturing within 6 months ²			\$105,391,381	\$87,969,155
41. Loans and bills payable ³			3,150,000	5,310,000
42. Traffic and car-service balances—Cr.....			91,003,905	90,592,165
43. Audited accounts and wages payable.....			580,086,987	538,390,770
44. Miscellaneous accounts payable.....			228,763,003	195,431,113
45. Interest matured unpaid.....			27,454,551	36,325,628
46. Dividends matured unpaid.....			8,597,155	7,733,855
47. Unmatured interest accrued.....			78,625,099	69,765,900
48. Unmatured dividends declared.....			36,211,763	29,691,108
49. Accrued accounts payable.....			216,106,141	173,949,340
50. Taxes accrued.....			739,255,457	605,822,819
51. Other current liabilities.....			104,399,376	94,996,589
52. Total current liabilities (items 41 to 51).....			2,113,653,437	1,848,009,287
53. Analysis of taxes accrued:				
53-01. U. S. Government taxes.....			571,156,583	450,733,427
53-02. Other than U. S. Government taxes.....			168,098,874	155,089,392
54. Other unadjusted credits.....			302,213,961	345,282,409

¹ Represents accruals, including the amount in default.

² Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.

³ Includes obligations which mature not more than one year after date of issue.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

the Investment Bankers' Association class at Northwestern University, Evanston, Ill., last month. Pointing out that the operating ratio of the road has grown progressively lower since December 31, 1947, the speaker said that such results "will be the talk of the industry and the talk of Wall Street." In fact, said he, "Some of the boys at Wall Street are saying already 'There ain't any such animal.'"

There is such an animal, however, Mr. Hill observed, and its astonishingly good figures are not due in any sense to "skimping." He finds the fixed plant

in excellent condition and evidence of the fact that the management has been "putting on fat." Mr. Hill admitted that the K.C.S.'s natural situation is paralleled by very few other roads, and that such characteristics as compactness, absence of many light-density branch lines and a high industrial growth factor, favor its prosperity. On the other hand, he is of the opinion that such advantages are valueless without a high-type management. In 1947, the K.C.S. (exclusive of the Louisiana & Arkansas) achieved 10,915 net ton-miles per mile of road a day and 54,785 gross ton-

miles per train-hour. It had a transportation ratio of 29.5 per cent, a maintenance ratio of 22.8 per cent and an operating ratio of 58.6 per cent. In May, 1948, 69 per cent of its freight train miles and 76.6 per cent of its gross ton-miles were handled by Diesel locomotives.

The analyst laid considerable stress on the fact that President W. N. Deramus and members of his family are holders of a large block of common stock of the road — well in excess of 20,000 shares — and that members of the board of directors constitute an additional substantial ownership, averaging "perhaps" about 15,000 shares. This owner-management, said Mr. Hill, is responsible for much of the good showing of the road, because its operators have a stake in its prosperity.

The success of the road is also due in great measure to the fact that it can be, and is, under the close personal supervision of its operating head. General Manager F. H. Hooper once remarked casually to Mr. Hill that he "did not write two letters in a year to the president of the road." Mr. Hooper and W. N. Deramus, III, (formerly assistant to Mr. Hooper but recently appointed assistant to the president of the Chicago Great Western) "know every day whether or not freight trains had full tonnage the day before and if they were on time; and if not, they do something about it. One man dispatches Diesel locomotives and has system authority. He is stationed at Shreveport, La., and can change his mind, if need be; take a locomotive off a New Orleans run and place it on the Dallas branch, should operations of the blast furnace at Daingerfield, (Tex.) require an additional train."

Would Have I.C.C. Cut Some Ore Rates to Upper Lake Ports

Examiners A. J. Banks and E. L. Boisseree have recommended in a proposed report that the Interstate Commerce Commission order the Great Northern and Duluth, Missabe & Iron Range to reduce by 9 cents per 100 lb. their rates on beneficiated iron ore from Keewatin, Minn., Nashwauk, and Hibbing to docks at Allouez, Wis., and Duluth, Minn. The proposed report is in No. 29502, a complaint filed March 13, 1946, by Butler Brothers, a producer of beneficiated ore, which seeks reparations in the amount of \$1,632,571, or "such other sum as the commission shall determine."

The examiners recommend an award of reparations with interest on the basis of the difference between line-haul charges paid on shipments covered by the complaint and the rate they would have the commission find reasonable. The assailed rate was 81 cents per 100 lb. when the complaint was filed, but the 11-cent Ex Parte 166 increase brought it up to 92 cents. The complainant sought a 72-cent rate, and the

examiners would have the commission prescribe that amount, as increased in Ex Parte 166, i.e., an 83-cent rate, as reasonable. The complaint also assailed the dockage charges on the ore, but the proposed report recommends that such charges (now 13 cents per 100 lb.) be found not unreasonable.

Beneficiated ore is a class 2 ore which requires some processing before it is suitable for blast-furnace use. The examiners base their recommended decision largely on their findings that rates which would permit the low-grade ores to move in competition with high-grade ores would be in the "public interest" and in the interest of the railroads. The G.N. is the principal road involved; as to it the examiners consider the recommended cut justified because "the assailed rates were designed to produce what appears to be an inordinately large proportion of Great Northern system revenues."

Reference was also made to tax concessions made by Minnesota in favor of beneficiated ore to stimulate production and thus preserve the supply of so-called direct-shipping ore. "Nevertheless," the report added, "the record affords no issue for the prescription of a freight rate differential in favor of low-grade ores as compared with high-grade ore."

Waybill Studies Indicate Coal-Traffic Distribution

The Bureau of Transport Economics and Statistics of the Interstate Commerce Commission has issued tabulations showing, on a one-per-cent-sample basis, the distribution by states and by rate territories of 1947 bituminous coal traffic and revenues. The compilations (Statements No. 4845 and No. 4846) are additions to the bureau's series of so-called waybill studies.

Hoover Group Would Change Federal Traffic Control, Not I.C.C.

Neglect of traffic management is one of five underlying deficiencies in government supply operations, according to the findings of a study by a "task force" of the Commission on Organization of the Executive Branch of the Government. The commission, which is preparing a report for Congress, is headed by former President Herbert Hoover.

The "task force," headed by Russell Forbes, former commissioner of purchases for the city of New York, also reported that storage and issue and utilization of surplus inventories receive little attention. At the same time, it cited the lack of a comprehensive government-wide system that gives "adequate emphasis" to the many phases of supply, including transportation.

Another major finding was that simplified and coordinated procedures in purchase of both military and civilian

supplies would result in annual savings of about \$250,000,000 and a reduction in inventories of \$2,500,000,000.

In addition to Mr. Forbes, other members of the "task force" include Bell and Ussery, traffic consultants, and J. H. Geary, former assistant manager of stores, Erie. C. E. Smith, vice-president in charge of purchases, New York, New Haven & Hartford, is a member of the advisory committee to the group.

Former President Hoover said in a recent statement that the commission would propose no change in the status of regulatory agencies such as the Interstate Commerce Commission. The Hoover statement was issued because "some confusion" had arisen over an earlier statement wherein the former President had referred to the possibilities of reducing the number of agency heads who report directly to the President.

Terminal-Area Cases Reopened

Division 5 of the Interstate Commerce Commission has reopened for further hearing the commercial-zone and terminal-area cases insofar as they relate to the maximum terminal areas of motor carriers and freight forwarders, and to the commercial zones of municipalities in the New York counties of Westchester and Nassau and New Jersey municipalities any parts of which are within five miles of New York city. The reopened proceedings are Ex Parte No. MC-37, Commercial Zones and Terminal Areas, and No. MC-C-2, New York, N. Y., Commercial Zone.

The areas and zones involved are those within which transportation by motor vehicle by or for truckers or forwarders is exempt from regulation except as to qualifications and maximum hours of service of employees and safety of equipment. The reopenings had been sought in petitions filed with the commission by various interested parties.

Ex Parte No. MC-37 is a general proceeding in which prior reports of the commission have prescribed commercial zones and terminal areas throughout the country. The report which determined the maximum terminal areas of truckers and forwarders was noted in the *Railway Age* of August 7, page 44.

B. of R.T. Loses Injunction Motion

The circuit court of appeals at Chicago has upheld a lower court decision denying the Brotherhood of Railroad Trainmen a motion to vacate a preliminary injunction which prohibits the Chicago River & Indiana and the Chicago Junction from continuing certain operating practices instituted in settlement of a strike threat in 1946. Eight eastern railroads secured the injunction on March 15, 1946, charging that the

changed methods of operation damaged them to the amount of \$10.96 per car of outbound loaded livestock and that the strike settlement deprived them of trackage rights granted in an Interstate Commerce Commission order of 1922. The practices in question call for, among other things, the movement by C. R. & I. and C. J. crews of freight cars normally handled by crews of the eastern lines (see *Railway Age* of February 23, 1946, page 414).

Cancels Order on Accounts Covering Protective Service

Division 1 of the Interstate Commerce Commission has canceled the order which would have prescribed, as of January 1, 1949, new operating revenue accounts 108½, Protective Service Revenue—Perishable Freight, and 117, Protective Service—Perishable Freight. The cancellation order, dated November 22, was accompanied by another order which requires class I roads to file quarterly reports of charges and credits for protective service to perishable freight on a prescribed form.

The first of these reports will be for the quarter ending March 31, 1949, and others are required for every quarter thereafter "until further order of the commission." Seemingly, the commission is thus seeking additional information before requiring the establishment of the proposed new accounts. The now-cancelled order prescribing them was first issued with a July 1, 1937, effective date. It never became effective because of successive modifications which set back the effective date from time to time.

Meanwhile, the commission has issued a notice announcing that the uniform system of accounts for persons furnishing cars or protective services against heat or cold, as modified its orders of September 29 and October 14, will become effective January 1, 1949. The notice said that no objections to the orders were received by the date (November 18) set for their filing.

I.A.M. Seeks Congressional Probe Of Lobbying Activities in Capital

The executive council of the International Association of Machinists has adopted a resolution calling for a Congressional investigation of "lobbying activities" conducted in Washington, D. C. The Association of American Railroads is on the resolution's list of organizations it would have subjected to the proposed inquiry.

"New England States" To Be Re-equipped

The twin "New England States" trains from Boston, Mass., over the Boston & Albany to and from New York Central system points between Toledo, Ohio, and Chicago will be completely re-equipped by the end of next

spring. Orders for the new cars were placed by the N. Y. C. in 1945 as part of its postwar passenger service improvement program. The total cost of the two new trains, including the Diesel-electric locomotives, will be approximately \$3,500,000. The new cars will be placed in service on the trains as they are received. In addition, new sleeping cars are scheduled to be assigned to other B. & A. trains.

Johnson Hopeful of Getting Steel for 12,000 Cars a Month

Director J. Monroe Johnson of the Office of Defense Transportation was reported this week to be making some progress on his undertaking to have the monthly-output target of the freight car program raised above the present 10,000-car basis. While still insisting that at least 14,000 cars a month are required, the colonel was understood to be at work on a plan to move first into a 12,000-car program. At a meeting tentatively scheduled for December 16, he has hopes of selling that idea to the Steel Products Advisory Committee of the Department of Commerce's Office of Industry Cooperation.

As reported in the *Railway Age* of December 4, page 60, Colonel Johnson has complained that he was not permitted by O.I.C. to make a "full presentation" in support of his proposed 14,000-car program when the advisory committee, at a November 19 meeting, approved steel allocations only for continuation of the present 10,000-car program. In a letter with which he transmitted his full presentation to interested government agencies, Colonel Johnson recalled that President Truman, in December, 1947, had "instructed" him to tell the car builders, railroads, and steel companies that he (the President) desired the program lifted to 14,000 cars per month by July, 1948, and to 16,000 cars by January, 1949.

Colonel Johnson has called at the White House since the decision to continue the program on only the 10,000-car basis was made by the advisory committee. He said on December 8, however, that he could make no statement at that time.

That the O.D.T. director has appealed to Secretary of Commerce Sawyer for Commerce-Department support of an enlarged program was revealed at the public hearing which O.I.C. held December 9 on the proposed extension of the 10,000-car program. The statement made there by B. S. Van Rensselaer, chief of O.I.C.'s transportation equipment division, embodied what amounted to a defense of O.I.C.'s failure to support Col. Johnson. Mr. Van Rensselaer expressed O.I.C.'s view to the effect that any proposal to enlarge the program should be subjected to the "most careful study and review before affirmative action is recommended."

Whereupon R. L. Glenn, director of



The Chicago, Rock Island & Pacific has applied "Scotchlite" to 200 new freight cars for greater safety at grade crossings at night. Approaching headlights of automobiles and trucks illuminate the reflective material, which is a product of the Minnesota Mining & Manufacturing Co., St. Paul, Minn.

O.D.T.'s division of manpower and materials, said he understood that the hearing would be limited to the proposed extension of the 10,000-car program, and that his own present action would be on that basis. Mr. Glenn added, however, that Col. Johnson had asked Secretary Sawyer to support an increase in the allotment of steel, but that was a matter which would be considered "at a later date."

Department of Justice Raps Rate Pact; N.I.T. League Supports It

Opposition to the rate-procedures agreement proposed by carrier members of the Western Traffic Association was expressed this week by the Department of Justice in a statement filed with the Interstate Commerce Commission which also received from the National Industrial Traffic League a statement in general support of the proposal. The N.I.T. League, however, asked the commission to hold a hearing on the pending application for approval of the agreement so that the league may present "such facts and argument as may be appropriate to the considera-

tion by the commission of the general requirements, safeguards and formalities which should be observed in agreements among carriers."

To that end the league suggests that a "test case" might well be made out of the western-agreement proceeding which is Section 5a Application No. 2. Section 5a is the new section added to the Interstate Commerce Act by the Bulwinkle-Reed Act which was passed by Congress last June. The western-agreement application was the first filed by railroads under the new section.

This week the commission received a similar application from eastern roads, docketing it as Section 5a Application No. 3 (see *Railway Age* of November 27, page 42, and December 4, page 63).

The N.I.T. League statement said that the league's general support of the proposed western set-up "reflects the satisfaction and approval of its membership and shippers generally under the long-established rate procedures in Western Classification Territory, which as a whole are proposed to be preserved and continued." The statement added that the proposed procedure "fulfills the broad objectives and purposes" for which Congress enacted section 5a, and is "in consonance with the national transportation policy."

The Department of Justice, on the other hand, read the proposed agreement as one which provides for rate organizations and procedures which "exceed" those authorized by the section and "violate rather than further" the national transportation policy. The proposed procedures, this statement added, "derogate unnecessarily from the national anti-trust policy by continuing a restraint and a monopolization of trade and commerce not required by a proper accommodation of the na-

RAILWAY AGE CO-EDITOR ON SCRAP DRIVE COMMITTEE

James G. Lyne, co-editor of *Railway Age*, is one of five editors of leading business papers just appointed by the Business Paper Advisory Committee of the Advertising Council to assist in the conduct and promotion of a nationwide business paper advertising campaign to salvage steel scrap from industrial sources. The campaign has been requested by the Department of Commerce to maintain steel mill capacities and build an emergency stockpile.

tional transportation policy to the national anti-trust policy."

Pleading that it had not had time to prepare detailed specifications of its objections to the plans, the department asked the commission to allow 30 days for that purpose. The commission allowed until January 5, 1949. The commission's notice, announcing receipt of the eastern-agreement application, said that any interested person desiring a hearing on that proposal should file a written request within 20 days from the date (December 8) of the notice.

B. of L. F. & E. Calls December 15 Strike on S. P.

The Brotherhood of Locomotive Firemen & Enginemen has called for December 15 a strike of its 3,000 members employed by the Southern Pacific in Oregon, California, Texas, Nevada and Arizona. The cause of the strike, according to D. B. Robertson, union president, is the alleged failure to reach an agreement with the railroad on settlement of "several hundred" grievances of individual employees.

Tuohy Calls for Prompt Rate Adjustments, Improved Efficiency

"Even with increases in rates, improved operating efficiency is necessary if railroads are to be prosperous and strong," Walter J. Tuohy, new president of the Chesapeake & Ohio, told the New York Society of Security Analysts and the Association of Customers Brokers on December 3.

"A better job in the management of the railroads' human resources," Mr. Tuohy also said, "will have a major effect on net income."

In opening his talk, Mr. Tuohy called rising costs "the first problem" of railroads today. He pointed out that the average annual compensation per employee is more than double the 1929 figure, and that current prices of necessary materials and supplies are 87 per cent higher than in 1929, while revenues of class I roads per ton-mile as of last August were only 1.26 cents against 1.08 cents in 1929.

The railroads, Mr. Tuohy added, "do not expect to be exempt from general wage and price trends," but "prompt adjustment of rates to costs is a basic essential if railroads are to continue to fulfill their necessary functions under private ownership and management."

The railroads themselves, he continued, "must apply modern business methods and profit by modern technology. We need locomotives that will burn coal more economically, run longer mileage and cost less to build and maintain. . . . There is urgent need for a drastic cut in the first cost of passenger cars. Other avenues of research and development are equally as important. Emphasis upon service, and cultivation of public good-will are blood-brothers to railroad efficiency."

During the balance of his address, Mr. Tuohy reviewed the C. & O.'s operating situation; outlined its financial status and dividend policy; discussed its coal and passenger traffic positions, and described the capital improvement program on which it is now engaged, as reported in detail in previous issues of *Railway Age*.

P. R. R. Acquiring Delaware River Land for Industrial Development

The Pennsylvania is purchasing, or acquiring options on, between 3,000 and 4,000 acres of land in the so-called Biles Island area along the Delaware river south of Morrisville, Pa., for anticipated future industrial development. When and if the development takes place, the area could be served by extension of an existing P. R. R. spur to the plant recently opened by the Victor Chemical Company on part of the Moon Island tract similarly acquired by the Pennsylvania some time ago.

Mottier Heads Illinois A. S. C. E.

At the annual meeting of the Illinois section of the American Society of Civil Engineers, held at Chicago on December 6, C. H. Mottier, vice-president and chief engineer of the Illinois Central and president of the American Railway Engineering Association, was elected president for the coming year. Walter S. Lacher, secretary of the A.R.E.A., was advanced from second vice-president to first vice-president.

Mahaffie I.C.C. Chairman For 1949; Will Succeed Lee

Interstate Commerce Commissioner Charles D. Mahaffie has been chosen by the commission as its chairman for the year 1949. He will succeed Commissioner William E. Lee who will continue as a member of the commission.

Commissioner Mahaffie has been a member of the commission since 1930; and for eight years prior to that time he was director of the commission's Bureau of Finance. He previously served as chairman of the commission for the year 1936.

Long Island Explains Penn Station Rental Figures

In support of its application for an average temporary increase of 25 per cent in commutation fares (reported in *Railway Age* of November 13, page 62), the Long Island has released figures designed to show that, contrary to popular belief, it does not pay an unreasonable rental for its use of the Pennsylvania's New York station and related facilities.

In 1947 the Long Island paid the P. R. R. rental of \$1,705,006, under an agreement approved by the Interstate Commerce Commission, for use of 400,000 sq. ft. of station space, East

River tunnels, 10th Avenue and Sunnyside yards and 22.7 mi. of track. It received from stores and restaurants built without cost to the Long Island in its section of the station rental of \$843,744, reducing its net rent payment to \$861,262. On a square foot basis for station space alone (disregarding other facilities) the gross rent is less than half the rent paid by other businesses in the station area, and substantially less than the cost to the Long Island of building or acquiring its own Manhattan terminal facilities.

Seaboard, A. C. L. to Speed Up Winter Services to Florida

Faster winter tourist service between New York and other northeastern cities and points in Florida has been announced by the Seaboard Air Line and Atlantic Coast Line, effective at various dates between December 15 and December 19.

The Seaboard's "Orange Blossom Special" will be 55 min. faster than last year southbound, and 50 min. faster northbound. The "Silver Meteor" will be 1 hr. faster from New York to Miami, 55 min. faster from New York to St. Petersburg, and 30 min. faster northbound from both points. The "Silver Star" is to be speeded up by 25 min. from New York to Miami; 20 min. from New York to St. Petersburg; and 10 min. from Miami to New York.

On the Coast Line, the 1948-1949 "Florida Special" will be 1 hr. faster than its 1947-1948 counterpart; while running times of the "East Coast Champion" and the "Miamian" will be cut by 45 min. and 30 min., respectively.

Peters to Head Perfect Shipping Campaign for Third Time

Irving M. Peters, of Chicago, traffic manager of the Corn Products Refining Company, has been named general chairman of the national management committee for the 1949 Perfect Shipping Campaign, it has been announced by Warner B. Shepherd, president of the National Association of Shippers Advisory Boards. Mr. Peters will direct the campaign for the third time.

Mr. Shepherd also announced selection of five regional vice-chairmen: J. J. Kornfeld, New Orleans, La., traffic manager, New Orleans Public Service; A. P. Little, Framingham, Mass., general traffic manager, Dennison Manufacturing Company; A. C. Street, San Francisco, Cal., manager, Barclay traffic division, Safeway Stores; H. F. Easterling, Monroe, La., traffic manager, Brown Paper Mill Company, and H. E. Chapman, Detroit, Mich., traffic manager, S. S. Kresge Company.

Next year's Perfect Shipping Campaign, Mr. Shepherd stated, will be conducted during April, and will be sponsored by the 13 regional Shippers Advisory Boards, the national associa-

tion of those boards, the Association of American Railroads, the Railway Express Agency and other transportation and shipping interests.

Freight Car Loadings

Loading of revenue freight in the week ended December 4 totaled 804,183 cars, the Association of American Railroads announced on December 9. This was an increase of 81,093 cars, or 11.2 per cent, over the previous week (which included the Thanksgiving holiday), a decrease of 74,405 cars, or 8.5 per cent, under the corresponding week in 1947, and an increase of 75,099 cars, or 10.3 per cent, over the equivalent 1946 week when work in the coal mines was halted by a strike.

Loadings of revenue freight for the week ended November 27, which included Thanksgiving Day, totaled 723,090 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loadings			
For the week ended Saturday, November 27			
District	1948	1947	1946
Eastern	129,511	144,193	130,140
Allegheny	150,419	168,028	137,774
Pocahontas	56,211	61,195	21,791
Southern	112,319	126,862	110,811
Northwestern	98,936	99,577	88,487
Central Western	113,837	128,246	114,356
Southwestern	61,857	64,230	57,552
Tot. West. Dist.	274,630	292,053	260,395
Tot. all Rds.	723,090	792,331	660,911
Commodities:			
Gr. & gr. pdts.	45,352	43,851	46,848
Livestock	11,636	13,797	17,566
Coal	144,455	173,085	52,563
Coke	15,346	14,743	8,998
Forest Products	33,477	40,697	39,258
Ore	44,800	34,992	22,327
Merchandise l.c.l.	90,026	103,357	117,330
Misc.	337,998	367,809	356,021
Nov. 27	723,090	792,331	660,911
Nov. 20	857,492	902,662	806,593
Nov. 13	871,677	878,283	917,124
Nov. 6	843,166	910,170	913,345
Oct. 30	931,750	940,746	922,312

Cumulative total
47 wks. 39,882,659 41,337,957 38,319,291

In Canada.—Carloadings for the week ended November 27 totaled 85,320 cars, as compared with 86,961 cars for the previous week, and 85,522 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
Nov. 27, 1948	85,320	34,271
Nov. 29, 1947	85,522	37,172
Cumulative totals for Canada:		
Nov. 27, 1948	3,780,133	1,762,107
Nov. 29, 1947	3,655,716	1,772,288

P.R.R. Establishes New Pittsburgh-Cleveland Train

A new train between Pittsburgh, Pa., and Cleveland, Ohio, will be placed in operation on December 12 by the Pennsylvania. To be known as "The Steeler," the train will stop only at Alliance, Ohio, and Hudson, and will make the run in two hours, 40 min., leaving Cleveland at 8 a.m. and Pittsburgh at

4:45 p.m. It will carry modern coaches, diner-lounge, and parlor car. Some adjustment will be made in other Pittsburgh-Cleveland service at the same time.

Florida Intrastate Rates

Railroads serving Florida have filed with the Interstate Commerce Commission a petition for an investigation of the intrastate rates imposed upon them as a result of the Florida Railroad and Public Utilities Commission's failure to permit the addition of the Ex Parte 162 and Ex Parte 166 increases.

Additional General News appears on pages 90 through 95.

OVERSEAS

European Railroads Forming Continent-Wide Reefer Pool

A European non-profit corporation designed to study the possibility of creating an inter-European refrigerator car pool which would be owned and operated by the principal railroad systems of that continent has been organized by the national railroads of Belgium, the Netherlands, France, Switzerland and Great Britain, according to a recent issue of Foreign Commerce Weekly. Negotiations are under way with the railroad administrations of Italy, Spain, the Bizone and French zone of Germany and the Scandinavian countries with a view to participation by these countries in the enterprise.

C. D. Young, Retired P.R.R. Officer, Becomes Adviser to Turkey

C. D. Young, who retired on June 1 as vice-president of the Pennsylvania, in charge of purchases, stores and insurance, has been appointed general adviser to the ministry of communications of the Turkish Republic. Mr. Young will spend alternating two-month periods in Turkey and the United States.

During World War II, Mr. Young was commissioned a brigadier general in the United States Army and also served as assistant director, deputy director and acting director of the Office of Defense Transportation (see *Railway Age* of May 22, page 64.)

E.C.A. Approves Large Outlay By France for Railroad Program

The European Cooperation Administration has agreed to the expenditure by France of 12,500,000,000 francs for the reconstruction and re-equipment of

French railroads. No Marshall-plan aid is involved as the money will come from so-called French counterpart funds.

The announcement also said that the funds will be applied principally toward the acquisition of 307 steam locomotives, 260 tenders, 223 electric locomotives and rail-cars, 450 passenger trains and several thousand freight cars. The French National railroads, it was announced recently, are now carrying 50 per cent more traffic than in 1939 and their labor personnel totals 482,000, which is 50,000, or approximately 10 per cent, fewer workers than they employed in 1939. Since the liberation, 2,000 repair and construction projects have been completed and only 100 breaks are still to be repaired.

EQUIPMENT AND SUPPLIES

PASSENGER CARS

The Canadian National has ordered 25 coaches from the Canadian Car & Foundry Co. Each car will be divided into a smoking section seating 32 persons and a non-smoking section seating 28.

LOCOMOTIVES

The Delaware & Hudson has ordered 17 Diesel-electric locomotive units from the American Locomotive Company, of which 12 will be 1,500-hp road-switching units and five will be 1,000-hp switching units.

FREIGHT CARS

9,286 Freight Cars Built in November

Freight cars produced last month for domestic use totaled 9,286, including 2,307 built in railroad shops, compared with October production of 8,934 cars, which included 2,285 built in railroad shops, the American Railway Car Institute has announced. November production included, the institute said, 2,242 box cars, 3,394 hopper cars, 1,934 gondola cars, 826 refrigerator cars and 890 cars of other types. New freight cars ordered in November for domestic use amounted to 4,852, including 1,575 to be built in railroad shops. The number of freight cars on order and undelivered on December 1 was 106,402, including 38,691 on order from railroad shops.

The Denver & Rio Grande Western has ordered 500 50-ton drop-bottom gondola cars from the Pressed Steel Car Com-

pany and 200 70-ton flat-bottom gondola cars from the Pullman-Standard Car Manufacturing Company. Both lots, inquiry for which was reported in *Railway Age* of October 23, are scheduled for delivery in the second quarter of next year.

The **Detroit & Toledo Shore Line** is inquiring for 100 70-ton steel covered hopper cars.

The **Northern Pacific** has ordered 250 50-ton gondola cars and 200 75-ton ore cars from its own shops and 250 40-ton refrigerator cars from the Pacific Car & Foundry Co. The authorization by the road's board of directors to purchase these cars plus 250 50-ton hopper cars was reported in *Railway Age* of November 13.

SUPPLY TRADE

Canadian Car & Foundry Net Rose Sharply in Fiscal Year

Net profit of the Canadian Car & Foundry Co. for the fiscal year ended September 30, 1948, totaled \$2,580,445, according to the firm's recently released annual report. Net income for the preceding fiscal year was \$712,682. Present orders on the books should keep the plants occupied well into 1950, V. M. Drury, president, said in a letter to stockholders which accompanied the report. Although the past year has been profitable and the immediate prospects are favorable, he added, "it should be borne in mind that car orders now in

hand represent a replacement program of the railways which to a considerable extent was created by the restrictions imposed upon them in the matter of equipment during the war years, and the present orders, when completed, will in large measure adjust this deficiency in rolling stock to normal operational requirements."

Charles H. Coombs has been appointed New York district manager for **Motorola, Inc.** Mr. Coombs will work with **Allan Williams**, regional manager in the east for Motorola, and will service the New York, Philadelphia, Pa., and Atlantic City, N. J., areas. He was formerly sales manager in the eastern division for the Radio Corporation of America.

The **Sherwin-Williams Company** has announced the following appointments in its transportation sales division: **R. H. Hill**, manager of the Atlantic Coast zone, with headquarters in New York; **J. F. Senters** and **W. H. Riemann**, sales representatives under Mr. Hill, at New York; **J. R. Stevenson**, in charge of the Gulf states zone, at Dallas, Texas; **W.**

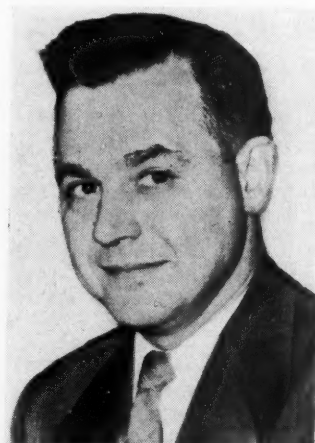
J. Boll, sales representative at Pittsburgh, Pa.; and **J. W. Wernicke**, Western area sales representative, with headquarters at Chicago.

Mr. Hill has been associated with Sherwin-Williams for 31 years and has held many sales and executive positions, including assistant to trade sales manager, metropolitan division trade sales manager, pleasure craft sales manager, and transportation territorial representative. Mr. Senters joined the company's New York office in September, 1926, and later worked in industrial sales and trade sales. Since 1937 he has been in the transportation sales department. Mr. Riemann joined the company in January, 1925, and first worked in the advertising service department in Philadelphia, Pa., and later in the accounting and sales departments. From 1941 until his recent appointment he was chief transportation clerk. Mr. Stevenson has been with Sherwin-Williams since 1916. In addition to handling transportation sales he also will be in charge of industrial sales in the Gulf states area. Mr. Boll started with Sherwin-Williams at Cleveland, Ohio, in June, 1924. Later he was transferred to industrial sales and in September,

1941, was appointed to the transportation zone department at Cleveland, which position he held until his recent promotion. Mr. Wernicke joined the sales department of the company, at Chicago, in February, 1931. For five years he was associated with trade sales; for four years with industrial sales, and for the last eight years with transportation sales.



R. H. Hill



J. W. Wernicke



J. F. Senters



W. H. Riemann



J. R. Stevenson



W. J. Boll

William F. Schryver has been appointed superintendent of the locomotive manufacturing division of the **General Electric Company**. Mr. Schryver joined the company in 1916 as a tool maker. He was appointed foreman in charge of building maintenance for the refrigerator cabinet division in 1931; general foreman in charge of assembly in the gun mount division in 1940; acting superintendent of the machine section of that division a year later; and superintendent in 1943. Mr. Schryver was transferred to the locomotive and car equipment control division in 1945 as assistant superintendent. He became superintendent in 1946, remaining in that position until his present promotion.

Nelson C. Walker has been appointed assistant district manager of the Berwick, Pa., plant of the **American Car & Foundry Co.** Mr. Walker was formerly associated, successively, with the Glenn L. Martin Company, the U. S. Time Corporation, the Waterbury Clock Company and the Noma Electric Corporation of Kearny, N. J., in various engineering and executive capacities. He subsequently was vice-president and general manager and, later, president of the United Tank Corporation, which position he held before joining American Car & Foundry.

Robert W. Galvin, who has been associated with **Motorola, Inc.**, since 1940, has been appointed executive vice-president. Mr. Galvin has been a director of the company since 1945 and before his



Robert W. Galvin

recent appointment was assistant to the vice-president in charge of the auto radio division for two and one-half years.

The **Hammond Machinery Builders, Inc.**, Kalamazoo, Mich., has opened a new office at 1021 East Eighth street, Los Angeles 21, Cal., to serve the West Coast metal finishing industry. **E. C. Hammett** has been appointed western representative at the office.

M. E. Nicklin, formerly manager of the export division of the **Oil Well Supply Company** (subsidiary of **U. S. Steel**), was recently appointed manager of sales for the firm's **Witte Engine Works Division** at Kansas City, Mo. He has been succeeded by **M. E. Keenan**, formerly assistant manager of the export division, with headquarters at New York. Mr.



M. E. Nicklin

Nicklin has been connected with "Oilwell" for 11 years, having begun as sales engineer at Oil City, Pa., in 1937, and continued in that position until his appointment as export division manager in 1940. He was graduated by Pennsylvania State College in 1925 with a B. S. degree in mechanical engineering.

The Chicago railroad sales office of the **Buda Company**, formerly located at 35 East Wacker Drive, was moved recently to Harvey, Ill., telephone Inter-ocean 8-9530.

Gerald J. Klopfenstein, manager of the meter sales division of **Bowser, Inc.**, Fort Wayne, Ind., has been appointed to the newly created post of assistant to vice-president and director of sales. He is succeeded by **James E. Doelling**, manager of the sales engineering division.

The **General American Transportation Corporation** has announced the removal, effective December 15, from 209 W. Jackson boulevard to 131 South Wabash avenue, Chicago 2, of its field erection division; its engineering department; and the purchasing department for its plate and welding, process equipment and plastics divisions.

The **Taylor Forge & Pipe Works**, Chicago, has announced the appointment of **Thomas J. Lingle** as western division manager in charge of manufacturing operations at its new Fontana, Cal., plant. Mr. Lingle also will direct west coast sales.

R. G. LeTourneau, Inc., Peoria, Ill., has announced the appointment of **Hans A.**

Bohuslav as special engineering consultant to the president. Mr. Bohuslav was formerly vice-president in charge of engineering and production for **Engineering Controls, Inc.**, Los Angeles, Cal.

N. George Belury, formerly vice-president of the engineered castings division of the **American Brake Shoe Company**, has been appointed president of that division, with headquarters as before at Rochester, N. Y. Mr. Belury, who has been associated with **Brake Shoe** since 1937, also has served in various sales capacities with the engineered castings division, including that of sales manager.

Frank L. Oldroyd has been appointed sales manager of the industrial division of **Oakite Products, Inc.**, with headquarters at New York. Mr. Oldroyd has been associated with the company for over 15 years and before his recent appointment was special field sales manager.

OBITUARY

F. W. Dressel, former vice-president of the **Lovell-Dressel Company**, died on December 1. He was 82 years old.

Clarence L. Willis, Sr., vice-president and general manager of the **Gulf Lumber Company**, Mobile, Ala., and former member of the board of directors of the **Southern Pine Association**, died at his home in Mobile on December 2, following an illness of six months.

ORGANIZATIONS

H. E. Warren, vice-president, purchases and stores, **Gulf, Mobile & Ohio**, will address the December 14 meeting of the **New England Railroad Club** on the subject of "Growing Pains of a Southern Railroad." The meeting will be held at the **Hotel Vendome**, Boston, Mass., at 6:30 p. m.

The annual "Ladies' Night" of the **Western Railway Club** will be held on December 18, at 6:00 p. m., at the **Hotel Sherman**, Chicago.

The **Car Department Association of St. Louis** will hold its annual Christmas party on December 21 at the **Hotel DeSoto**, St. Louis, Mo. Election of officers for the ensuing year will precede the party.

The **Executive Committee of the Allegheny Regional Advisory Board** will meet with the **Railroad Contact Committee** in the **Roosevelt Hotel**, Pittsburgh, Pa., at 12:15 p. m. December 15. **W. E. Fowler**, general traffic manager, **Youngstown Sheet & Tube Co.**, will

preside. W. E. Callahan, manager, Open Top Section, Car Service Division, Association of American Railroads, will report on national transportation conditions. W. W. Patchell, general manager, Central region, Pennsylvania, will report for the Railroad Contact Committee. Forecast of carloadings for the first quarter of 1949 will be released.

The Christmas dinner meeting of the **Women's Traffic Club of New York** will be held in the Tower Club dining room of the Park Central Hotel, Seventh avenue at 55th street, New York, on December 14, at 6:30 p.m.

The December 13 meeting of the **Traffic Club of St. Louis**, to be held in the Gold room of the Jefferson Hotel, St. Louis, Mo., will have as its subject "Bikini Atomic Bomb Test."

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC AGENTS—C. A. Melin, 11115 Lake Ave., Cleveland 2, O.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS—B. D. Branch, C.R.R. of N. J. 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 14-16, 1949, Stevens Hotel, Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 13-15, 1949 (tentative dates) Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION—L. P. East, Pennsylvania Railroad, Richmond, Ind. Annual meeting, April 17-20, 1949, Chamberlin Hotel, Old Point Comfort, Va.

AMERICAN RAILWAY ENGINEERING ASSOCIATION—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 15-17, 1949, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION—Hugh L. Fitts, Missouri Pacific Magazine, 1400 M. P. Bldg., St. Louis 3, Mo.

AMERICAN SHORT LINE RAILROAD ASSOCIATION—C. E. Huntley, Tower Bldg., Washington 5, D. C.

AMERICAN SOCIETY FOR TESTING MATERIALS—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Spring meeting and A.S.T.M. Committee Week, February 28-March 4, 1949 Edgewater Beach Hotel, Chicago, Ill. Annual meeting, June 27-July 1, 1949, Chalfonte-Haddon Hall, Atlantic City, N.J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS—C. E. Davies, 29 W. 39th St., New York 18, N. Y.

Railroad Division—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION—H. L. Dawson, 1427 Eye St., N. W., Washington 5, D. C. Annual meeting, April 26-28, 1949, Jefferson Hotel, St. Louis, Mo.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C. of C. Bldg., Cincinnati 2, O.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo.

ASSOCIATION OF AMERICAN RAILROADS—

George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section—W. A. Fairbanks, 30 Vesey St., New York 7, N. Y.

Fire Protection and Insurance Section—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Freight Station Section—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May 25-27, 1949, Congress Hotel, Chicago, Ill.

Medical and Surgical Section—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Protective Section—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Safety Section—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Engineering Division—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 15-17, 1949, Palmer House, Chicago, Ill.

Electrical Section—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Signal Section—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 12-14, 1949, Edgewater Beach Hotel, Chicago, Ill.

Mechanical Division—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 27-29, 1949, Congress Hotel, Chicago, Ill.

Electrical Section—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill.

Purchases and Stores Division—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C. Annual meeting, June 27-29, 1949, Palmer House, Chicago, Ill.

Freight Claim Division—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 14-16, 1949, Boston, Mass.

Motor Transport Division—Transportation Bldg., Washington 6, D. C.

Car Service Division—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance Accounting, Taxation and Valuation Department—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Treasury Division—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, October, 1949, General Oglethorpe Hotel, Savannah, Ga.

Traffic Department—Walter J. Kelly, Traffic Officer, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS—E. A. Abbott, 1103 Cleveland St., Evanston, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS—F. L. Johnson, Gulf, Mobile & Ohio R.R., Mobile 13, Ala. Annual meeting, May 25-27, 1949, Battery Park Hotel, Asheville, N. C.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill.

CANADIAN RAILWAY CLUB—C. R. Crook, 4415 Marcell Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO—J. A. Dinges, Union Tank Car Company, 228 N. LaSalle St., Chicago 1, Ill. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO—R. E. Mann, 1840-42 Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

CHICAGO LUNCHEON CLUB OF MILITARY RAILWAY SERVICE VETERANS—Col. R. O. Jensen, Schiller Park, Ill. Luncheon second Wednesday of each month, Chicago Traffic Club, Palmer House, Chicago, Ill.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS—C. F. Weil, American Brake Shoe

Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS—H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark.

MAINTENANCE OF WAY CLUB OF CHICAGO—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, when the third Monday, at Hardings at the Fair.

MASTER BOILER MAKERS' ASSOCIATION—A. F. Stigmeier, 29 Parkwood St., Albany 3, N. Y.

METROPOLITAN MAINTENANCE OF WAY CLUB—John Vreeland, Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in October, December, February and April.

MILITARY RAILWAY SERVICE VETERANS—S. Thomson, 1061 W. Sheridan Road, Chicago 40, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, August, 1949, Hotel Cleveland, Cleveland, O.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS—Frank Cross, General Mills, Inc., Oklahoma City, Okla.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C.

NATIONAL RAILWAY APPLIANCE ASSOCIATION—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in connection with American Railway Engineering Association Convention, March 14-17, 1949, Coliseum, Chicago, Ill.

NEW ENGLAND RAILROAD CLUB—T. F. Dwyer, Jr., 683 Atlantic Ave., Boston, 11, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB—D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August and September and December, 29 W. 39th St., New York, N. Y.

NORTHWEST CARMEN'S ASSOCIATION—E. N. Myers, Minnesota Transfer Ry., 1434 Iowa Ave. W., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION—R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB—William S. Wollner, P. O. Box 458, San Rafael, Calif. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION—J. McC. Price, Allen-Bradley Company, 445-447 N. La Salle St., Chicago 10, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago 4, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION—Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meeting, September 12-14, 1949, Peabody Hotel, Memphis, Tenn.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 13-15, 1949, (tentative dates) Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY

CLUB.—A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—P. J. Climer, (Acting Sec'y) N. C. & St. L. Ry., Nashville, Tenn.

TORONTO RAILWAY CLUB.—D. L. Chambers, P. O. Box 8, Terminal "A", Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q. and C. Company, 59 E. Van Buren St., Chicago 5, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill. Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.

ABANDONMENTS

Division 4 of the Interstate Commerce Commission has authorized:

Central of New Jersey.—To abandon that part of its so-called Seashore branch from a point in Highlands, N. J., to the end of the branch in Sea Bright, 1.1 mile. All regular train service on the line was discontinued in 1945 and only irregular freight service is now provided when traffic is available.

Cumberland & Pennsylvania.—To abandon a 1.5-mile branch in Allegany County, Md. The line was constructed to serve a coal mine, which was closed down on March 31, 1947.

Application has been filed with the I.C.C. by:

Illinois Central.—To abandon an 8.06-mile line between Manela, Ill., and BK Junction. The application stated that service over the line is no longer required; and that it is paralleled, at distances no greater than 2 miles, by a main freight line of the applicant.

CONSTRUCTION

Atchison, Topeka & Santa Fe.—This road has awarded a contract to the H. H. Larsen Company, San Francisco, Cal., for construction of a ticket office in the Sachs building, 136 Geary street, San Francisco.

Lake Superior & Ishpeming.—This road has begun work on a 14.3-mi. extension to its North Lake branch to serve new iron ore mines to be developed in the territory. The project, estimated to cost \$900,000, is scheduled to be completed by October 15, 1949. A contract for clearing and grading has been awarded to A. Lindberg & Sons, Ishpeming, Mich. The extension will be completed with 80-lb. rail and will include one automatic interlocking plant and one flashing light highway crossing signal.

Minnesota Transfer.—This company, located at St. Paul, Minn., is now completing various projects amounting to \$79,500. Included are the construction of three locker and toilet buildings and a new oil house, all built of concrete blocks; replacement of a 60-ft. turntable with an SH 70-ft. electrically-operated table; installation of a new coaler; installation of a 15-inch sewer, 1200 ft. long, in main switching yard; and installation of a yard communication system.

Norfolk & Western.—New boilers to provide steam for the Roanoke, Va., shops and yard, the N. & W's general office building, passenger station and other nearby structures will be installed starting next spring in the Roanoke shops' power house at an estimated cost of \$950,000. The present seven boilers will be replaced by three bent-tube spreader-stoker-fired, continuous-ash-discharge boilers, each with a capacity of 60,000 lb. of steam an hour. The project also includes relocation of service tracks and installation of modern dust collecting equipment to eliminate fly ash. The replacement probably will not be completed before the summer of 1950 because all work must be done in warm months.

FINANCIAL

Delaware, Lackawanna & Western.—*New Member of Board of Managers.*—W. Paul Stillman, president of the National State Bank and chairman of the board of the Mutual Benefit Life Insurance Company, both of Newark, N. J., has been elected a member of this road's board of managers.

Facility Terminal.—*Acquisition.*—Division 4 of the Interstate Commerce Commission has dismissed without prejudice this new company's application (Finance Docket No. 16140) which sought authority to lease and operate 3.1 miles of switching track on the Navy Industrial Reserve Facility, south of Kansas City, Mo. The applicant requested dismissal of its application pending further negotiations between the Navy Department and the Westinghouse Electric Company, which, it said, is leasing a substantial portion of the property involved. (See *Railway Age* of June 26, page 136.)

North Louisiana & Gulf.—*Acquisition.*—This company has applied to the Interstate Commerce Commission for authority to acquire, from the Louisiana & North West, a 15-mile line between Gibsland, La., and Bienville. The application stated that a purchase agreement has been entered, subject to issuance by the commission of a certificate

authorizing abandonment of the line by the L.&N.W.

New York Central.—*Dividend.*—This road has declared a dividend of 50 cents a share on the common stock, payable January 15 to stockholders of record December 22. The previous payment on this issue was \$1 a share in January, 1946.

Annual Reports

Delaware & Hudson.—*Annual Report.*—Operating revenues of this road last year amounted to \$53,688,735, compared with \$44,407,360 in 1946. Operating expenses totaled \$41,003,245, compared with \$37,583,406. Net income was \$4,54,003, compared with \$2,131,148. Current assets at the end of the year were \$15,899,359, compared with \$12,925,545. Current liabilities were \$9,007,125, compared with \$5,787,900. Long term debt was \$86,816,556, compared with \$90,615,763.

Delaware, Lackawanna & Western.—*Annual Report.*—Operating revenues of this road last year totaled \$81,154,430, compared with \$69,481,551 in 1946. Operating expenses were \$3,825,738, compared with \$58,413,674. Fixed charges amounted to \$5,170,856, compared with \$5,192,557. Net income was \$3,257,325, compared with \$36,216. Current assets at the end of the year were \$23,132,936, compared with \$21,750,097. Current liabilities were \$10,171,333, compared with \$8,797,621. Long term debt was \$136,092,946, compared with \$138,918,732.

Lehigh & New England.—*Annual Report.*—Operating revenues of this company last year totaled \$7,552,195, compared with \$6,823,124 in 1946. Operating expenses totaled \$4,797,729, compared with \$4,690,729. Fixed charges were \$141,553, compared with \$154,456. Net income was \$1,439,065, compared with \$1,118,538. Current assets at the end of the year were \$3,052,380, compared with \$2,514,205. Current liabilities were \$2,367,026, compared with \$2,081,039. Long term debt was \$5,121,000, compared with \$5,569,000.

Louisville & Nashville.—*Annual Report.*—Operating revenues of this road in 1947 were \$189,697,168, compared with \$199,666,273 in the preceding year. Operating expenses were \$156,337,231, compared with \$140,483,173. Fixed charges were \$6,178,695, compared with \$6,134,648. Net income was \$13,286,947, compared with \$11,579,590. Current assets at the end of the year were \$73,638,347, compared with \$59,038,005. Current liabilities amounted to \$31,084,619, compared with \$26,473,328. Long term debt totaled \$182,810,881, compared with \$172,416,212.

New Securities

Application has been filed with the Interstate Commerce Commission by:

Pennsylvania-Long Island.—To assume liability jointly for an additional \$5,445,000 of series K equipment trust certificates, the final installment of a \$9,480,000 issue, proceeds of which would be applied toward purchase of equip-

ment to be used by the L.I., as described in *Railway Age* of May 1, page 66. The certificates, to be sold on the basis of competitive bidding, would be dated May 1 and would mature in 15 annual installments of \$363,000 each, starting May 1, 1949.

Division 4 of the I.C.C. has authorized: **Chesapeake & Ohio.**—To issue and sell \$40,000,000 of refunding and improvement mortgage, 3½ per cent bonds, series H, to reimburse the company in part for previously made capital expenditures. The commission's order authorizes sale of the issue at 98.65, the bid of Halsey, Stuart & Co. and associates which had been accepted subject to commission approval. On that basis the average annual interest cost to the C.&O. will be about 3.96 per cent. The bonds will be dated December 1, 1948, and will mature December 1, 1973. They will be redeemable for purposes other than the sinking fund on any date prior to maturity and for sinking-fund purposes on any semi-annual interest-payment date beginning December 1, 1949. Redemptions on the former basis will be at prices ranging from 103½ during the issue's first year to par during its last year. Sinking-fund redemption prices will range from 101½ during the year beginning December 1, 1949, to par during the issue's last year. (See *Railway Age* of October 30, page 102).

Illinois Terminal.—To assume liability for \$1,000,000 of series D equipment trust certificates, proceeds of which will be applied toward purchase of 300 50-ton steel-sheathed box cars, as described in *Railway Age* of October 23, page 62. The certificates will be dated November 1 and will mature in 20 semi-annual installments of \$50,000 each, starting May 1, 1949. The report also approves a selling price of 99.85 with a 2½ per cent interest rate, the bid of the Mercantile-Commerce Bank & Trust Co., and associates, on which basis the average annual cost will be approximately 2.53 per cent.

Pennsylvania.—To assume liability for \$7,935,000 of equipment trust certificates, series V, to finance in part the acquisition of equipment expected to cost a total of \$19,877,500. The equipment to be acquired includes 22 Diesel-electric freight locomotive units (12 1,500-hp. "A" units and 10 1,500-hp. "B" units), 101 Diesel-electric switching locomotives (47 of 1,000 hp., 44 of 660 hp. and 10 of 380 hp.), and 49 passenger cars. The certificates will be dated November 1 and will mature in 15 annual installments of \$529,000 on November 1 of each year from 1949 to 1963, inclusive. The commission's report approves a selling price of 99.0399, with a 2½ per cent interest rate, the bid of Halsey, Stuart & Co., on which basis the average annual interest cost will be about 2.65 per cent. (See *Railway Age* of November 13, page 67).

Pennsylvania.—To assume obligation and liability, as lessee and guarantor, in respect of the payment of principal, interest and sinking-fund requirements for \$14,518,000 of first mortgage series A 3¼ per cent bonds which its lessor, the New York Bay, has been authorized to issue and deliver to it. The bonds will be dated October 1, will be due October 1, 1973, and will be exchanged

for a like principal amount of first mortgage 3¼ per cent series A bonds, due August 1, 1978. The report also approves the sale of the bonds by the Pennsylvania to the Equitable Life Assurance Society on a bid of 100 per cent of par and accrued interest from October 1, based on a 3¼ per cent interest rate. Proceeds from the sale will be used for "corporate purposes" of the Pennsylvania. The bonds will be redeemable at 105, if redeemed between October 1, 1949, and March 31, 1952; at their principal amount plus a premium equal to one-fourth of one per cent for each year or part thereof, if redeemed between April 1, 1952, and April 1, 1971; and at their principal amount, if redeemed on or after April 1, 1971. They also will be redeemable for sinking fund purposes, with accrued interest applying in all cases.

Average Prices Stocks and Bonds

	Dec. 7	Last week	Last year
Average price of 20 representative railway stocks	44.07	42.42	45.86
Average price of 20 representative railway bonds	87.98	87.72	84.29

Dividends Declared

Allegheny & Western.—guar., \$3.00, semi-annually, payable January 3, 1949, to holders of record December 21.

Atchison, Topeka & Santa Fe.—common, \$1.50, quarterly, payable March 2, 1949, to holders of record January 28, 1949; 5% preferred, \$2.50, semi-annually, payable February 1, 1949, to holders of record December 31.

Chicago & North Western.—common (year end), \$2.00; 5% preferred series A, \$2.50, both payable December 31 to holders of record December 10.

RAILWAY OFFICERS

EXECUTIVE

George B. Matthews, whose promotion to operating vice-president of the St. Louis Southwestern at St. Louis, Mo., was reported in the *Railway Age* of November 6, was born on November 16, 1892, at Macon, Ga., and began his railroad career in 1907 as a clerk with the Kansas City, Memphis & Birmingham (now St. Louis-San Francisco) at Birmingham, Ala. He subsequently held positions as caller, yard clerk, clerk, and various other posts in the offices of superintendent, trainmaster and chief dispatcher of the Southern. From 1913 to 1917, he was associated with the Atlanta, Birmingham & Atlantic (now part of the Atlantic Coast Line), as per diem clerk, chief clerk to superintendent of transportation and chief clerk to general manager. Following two years of military service during World War I, he served successively as statistician, chief clerk to general manager and inspector of operations of the following lines: A. B. & A.; Atlanta & West Point; Georgia; Charleston & Western Carolina; Geor-

gia & Florida, and St. L.-S. F. east of the Mississippi river. In 1920 he returned to the A. B. & A. as car accountant and assistant general superintendent of transportation. Other positions subsequently held by Mr. Matthews were: car distributor, Fruit Growers Express Company; superintendent of transportation, Georgia & Florida, Augusta, Ga.; and chief clerk,

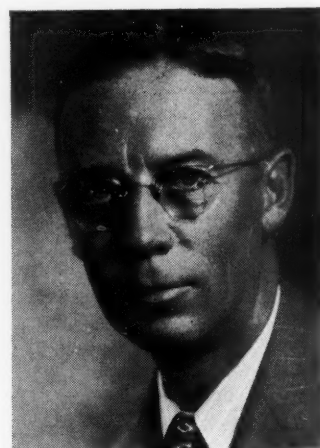


George B. Matthews

assistant superintendent of transportation, Mobile & Ohio (now Gulf, Mobile & Ohio), St. Louis.

In December, 1922, Mr. Matthews joined the Cotton Belt as transportation assistant, and was later made assistant to vice-president. He was advanced to superintendent of transportation in 1931 and to general superintendent at Tyler, Tex., in October, 1946, which post he held at the time of his recent appointment.

Frank C. S. Evans, whose appointment as vice-president and general counsel of the Canadian Pacific at Montreal, Que., was reported in the *Railway Age*



Frank C. S. Evans

of October 9, was born at Owen Sound, Ont., on April 22, 1898, and attended Osgoode Hall, Toronto, Ont. In 1923, Mr. Evans engaged in the private practice of law with Lucas & Evans, To-



Steam trains are making 2,000,000 miles a day



While the spotlight of public attention naturally falls on newest developments, it is sometimes well to back off and take a look at the overall picture.

We're thinking of the steam locomotive. These locomotives are making better than two million train-miles today—and will do it again tomorrow and the next day. They—these steam locomotives—are producing more revenue ton-miles right now than ever before in peacetime history.

Many of these locomotives are old, too old, and have distorted the statistics on performance. Many, however, are modern. And on modern steam power—locomotives that pack 5000 to 9000 horsepower and can stay on the road for 16 and 18 hours, and then turn around in an hour or two—the statistics look pretty good.

We build such modern power—and are convinced that it has its place.



DIVISIONS: Lima, Ohio — Lima Locomotive Works Division; Lima Shovel and Crane Division. Hamilton, Ohio — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

ronto, and from 1924 until January, 1935, he was associated with the law department of the Hydro-Electric Power Commission of Ontario. Entering the service of the Canadian Pacific in January, 1935, as transport service representative, he became solicitor in April, 1938. He was appointed assistant general solicitor on September 1, 1942, and general solicitor in February, 1945. Mr. Evans was promoted to general counsel in September, 1947, which position he held until his recent appointment as vice-president and general counsel.

Walter Reese, whose appointment as vice-president, Central departments, Railway Express Agency, with headquarters at Chicago, was reported in the *Railway Age* of September 25, entered the service of the R. E. A. and its predecessor companies in 1904. He later held various positions in the South and Southwest, and, during the years from 1918 to 1934, served as an assistant to the operating vice-president at St. Louis, Mo., and at Chicago. He subsequently held positions as general man-



Walter Reese

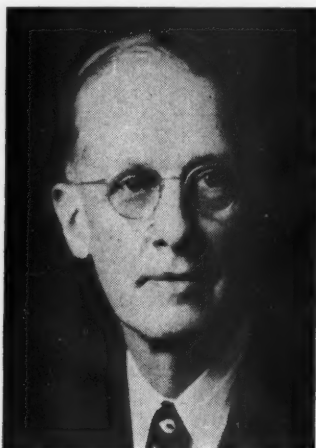
ager of the Northern department at St. Paul, Minn., and as executive assistant to the president at New York. In 1937 he became general manager of the Eastern Lakes department at Cleveland, Ohio, and in 1940 was advanced to vice-president and general manager of the Mississippi Valley department at St. Louis. Mr. Reese, immediately prior to his recent appointment, was operating vice-president at San Francisco, Cal., from which point he directed express operations throughout the West.

Howard Hale Clark, whose appointment as assistant to vice-president of the Erie at Cleveland, Ohio, was reported in the *Railway Age* of October 2, was born at Buffalo, N.Y., on April 16, 1905, and was graduated from Cornell University, Ithaca, N.Y., with an electrical engineering degree in 1926. He entered railroad service in 1926 as a levelman on the Lehigh Valley, going with the Erie two years later in the

same capacity. Mr. Clark's other positions with the Erie have included general foreman of the Susquehanna division (1930); assistant division engineer of the Buffalo division (1933); inspector of operation for the system (1936); trainmaster of the New York division (1937); assistant superintendent of the Marion division (1942), and superintendent of the Kent division at Marion, Ohio, (1944), in which capacity he served until his recent promotion.

David K. Buik has been appointed special representative of the president of the Canadian Pacific in London, England, succeeding the late **William Baird**, who died in London last September. Mr. Buik has been connected with the C. P. R. since 1928, and for the past year and a half has been assistant to the managing director of Canadian Pacific Steamships.

Howard F. Fritch has resigned as president of the Boston & Maine Transportation Company to become president and a director of the New England Transportation Company, New York, New Haven & Hartford bus and truck subsidiary in Massachusetts, Rhode Island and Connecticut. Mr. Fritch also will serve as a director of the Connecticut Company, a transit company serving a large portion of that state, and as assistant to the president of the New Haven. A graduate of the Worcester Polytechnic Institute, Mr. Fritch served the Eastern Massachusetts Street Railway Company and its predecessors for 14 years, in several capacities, finally as assistant general



Howard F. Fritch

manager. He went with the Boston & Maine in 1924 as assistant to the chairman of the executive committee and was engaged in special studies of passenger conditions for two years before being appointed passenger traffic manager in 1926. He has been director of budgets of the B. & M. at Boston, Mass., since 1930. Mr. Fritch organized the Boston & Maine Transportation Co., a subsidiary of the B. & M., in 1924 for the purpose of operating buses

and trucks in Boston & Maine territory and served as president since that time. He is also chairman of the Motor Transport Division of the Association of American Railroads.

W. E. Bolton, whose promotion to assistant to president of the Chicago, Rock Island & Pacific at Chicago, was reported in the *Railway Age* of November 27, was born on October 7, 1891, at Toronto, Ont. He entered railway service in 1914 as secretary to vice-president of the Canadian Northern (now Canadian National), and in the following year was appointed assistant chief clerk to general manager at Toronto. Following a brief period of service during 1917 in the office of



W. E. Bolton

general superintendent of motive power, Mr. Bolton joined the Seaboard Air Line at Norfolk, Va., as secretary to general manager. He joined the Rock Island in 1918 as statistician in the engineering department at Chicago, advancing two years later to the post of secretary to vice-president. Mr. Bolton was appointed chief clerk in the operating department in 1923 and assistant to vice-president in 1929. He was further advanced to industrial commissioner in 1938, which post he held at the time of his recent advancement.

Eugene B. Finegan, vice-president of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, has retired following a railroad career of 51 years.

William N. Deramus, III, whose appointment as assistant to president of the Chicago Great Western at Chicago, was reported in the *Railway Age* of November 13, was born at Pittsburg, Kan., on December 10, 1915. He obtained his higher education at the University of Michigan and the Harvard Law School, receiving an LL.B. degree from the latter in 1939. Mr. Deramus entered railroad service with the Wabash in 1939 as transportation apprentice, serving at St. Louis, Mo., and Decatur, Ill. He was assistant trainmaster at St. Louis from 1941 to 1943, at which time he entered the Military

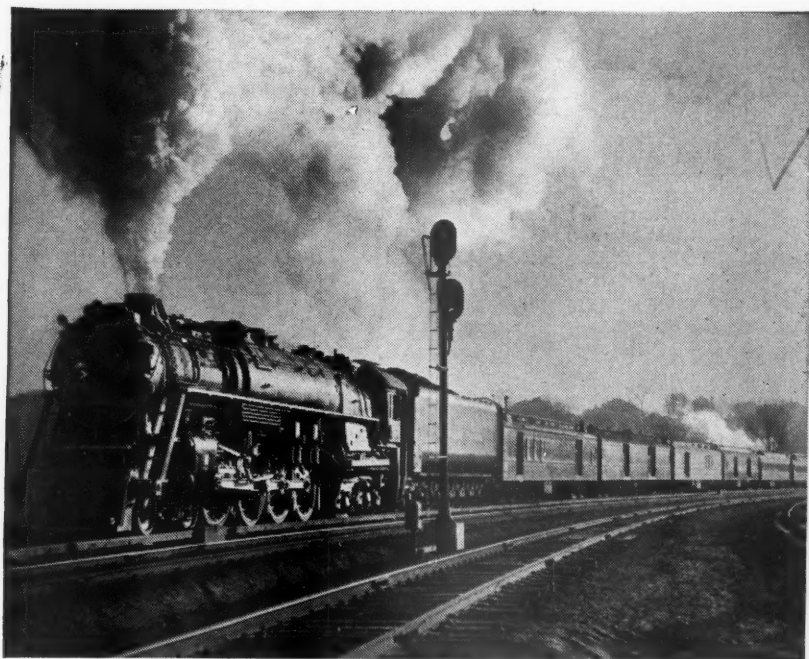
Not only is the maximum utilization of every locomotive essential today, but each locomotive should be kept in top operating condition at all times.

WITH *FEWER* LOCOMOTIVES TO DO *MORE* WORK

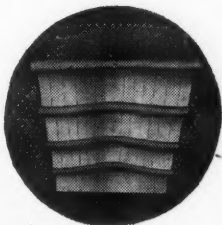
Even in the case of older locomotives that cannot be immediately modernized, it is important to keep their steaming efficiency as high as possible.

To secure all the power a locomotive is capable of producing, a 100% brick arch should be constantly maintained in its fire-

box. Whatever the type of firebox, a Security Sectional Arch will give efficient service with low maintenance costs.



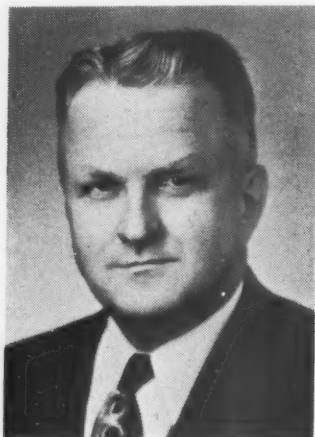
**HARBISON-WALKER
REFRACTORIES CO.**
Refractories Specialists



AMERICAN ARCH CO. INC.
60 East 42nd Street, New York 17, N. Y.
Locomotive Combustion Specialists

Railway Service. Following duty as a captain and later major, he joined the Kansas City Southern in 1946 as assistant to general manager, which post he held at the time of his recent appointment.

Harry C. Munson, whose appointment as assistant vice-president—operation of the Western Pacific at San Francisco, Cal., was reported in the *Railway Age* of November 6, was born at Oslo, Norway, on June 25, 1901. He attended high school at Muskegon, Mich., and was graduated from Iowa State University in June, 1923, with a degree in engineering. He began his railway service immediately after graduation as a rodman with the Chicago, Milwaukee, St. Paul & Pacific, and later served as an instrumentman at Marion, Iowa, and at Chicago. In April, 1928, Mr. Munson became assistant engineer at



Harry C. Munson

Chicago, advancing the next year to division engineer at Sioux City, Iowa. In April, 1931, he was appointed trainmaster at Ottumwa, Iowa, and later held the same position on several other divisions until his appointment as assistant superintendent at Wausau, Wis., in December, 1937. From 1938 to 1940, he was superintendent successively at Austin, Minn., Savanna, Ill., and La Crosse, Wis. In May, 1942, he became general superintendent at Milwaukee, Wis., and was appointed assistant general manager at Chicago in June, 1946. Mr. Munson was holding the latter post at the time of his appointment as assistant vice-president—operation of the Western Pacific.

W. E. Zelner has been appointed assistant to the operating vice-president of the Reading, with headquarters at Philadelphia, Pa., succeeding **J. H. Smedley**, promoted.

James E. Doyle, assistant to the vice-president of traffic of the Chesapeake & Ohio, has been appointed assistant vice-president of traffic, with headquarters as before at Cleveland, Ohio. Mr. Doyle, who is 45 years of age, entered

railroad service with the Chesapeake & Ohio as a clerk at Richmond, Va., in 1921. After working in the traffic departments of the Southern and the Atlantic Coast Line, he returned to



James E. Doyle

the C. & O. in 1923 and served in various secretarial and clerical capacities at Richmond and Cleveland from 1923 until 1942, when he became assistant to the vice-president of traffic.

L. Orval Frith, whose appointment as assistant to the president of the Kansas City Southern Lines at Kansas City, Mo., was reported in the *Railway Age* of December 4, entered railroad service as a clerk in the car service department



L. Orval Frith

of the K. C. S. in 1923. After serving as secretary in that department for two years, he became secretary to executive vice-president. From 1945 until his recent appointment, Mr. Frith was office manager for the president at Kansas City.

FINANCIAL LEGAL and ACCOUNTING

F. W. Stetekluh, whose election as controller of the Northern Pacific at St. Paul, Minn., was reported in the *Rail-*

way Age of November 6, was born at Eau Claire, Wis., on March 8, 1888, and entered railway service in June, 1906, as an extra-gang timekeeper on the Chicago, St. Paul, Minneapolis & Omaha. He later held various minor positions with that road until February, 1912, when he became a division accountant on the Chicago Great Western at St. Paul. In June, 1918, Mr. Stetekluh was appointed a special accountant of the Minneapolis, St. Paul & Sault Ste. Marie, and later in the same year he resigned to go with the N.P. in a similar capacity, with headquarters at St. Paul. In 1920 he was advanced to assistant auditor of disbursements and, a short time later, to general accountant. On January 1, 1928, Mr. Stetekluh became auditor of disbursements, and on February 15, 1938, he was promoted to assistant general auditor. He was further promoted to general auditor in April, 1946, which position he held at the time of his recent advancement.

Merle W. White, claims adjuster of the Minneapolis & St. Louis at Albert Lea, Minn., has been appointed general claim agent in the road's law department at Minneapolis, Minn.

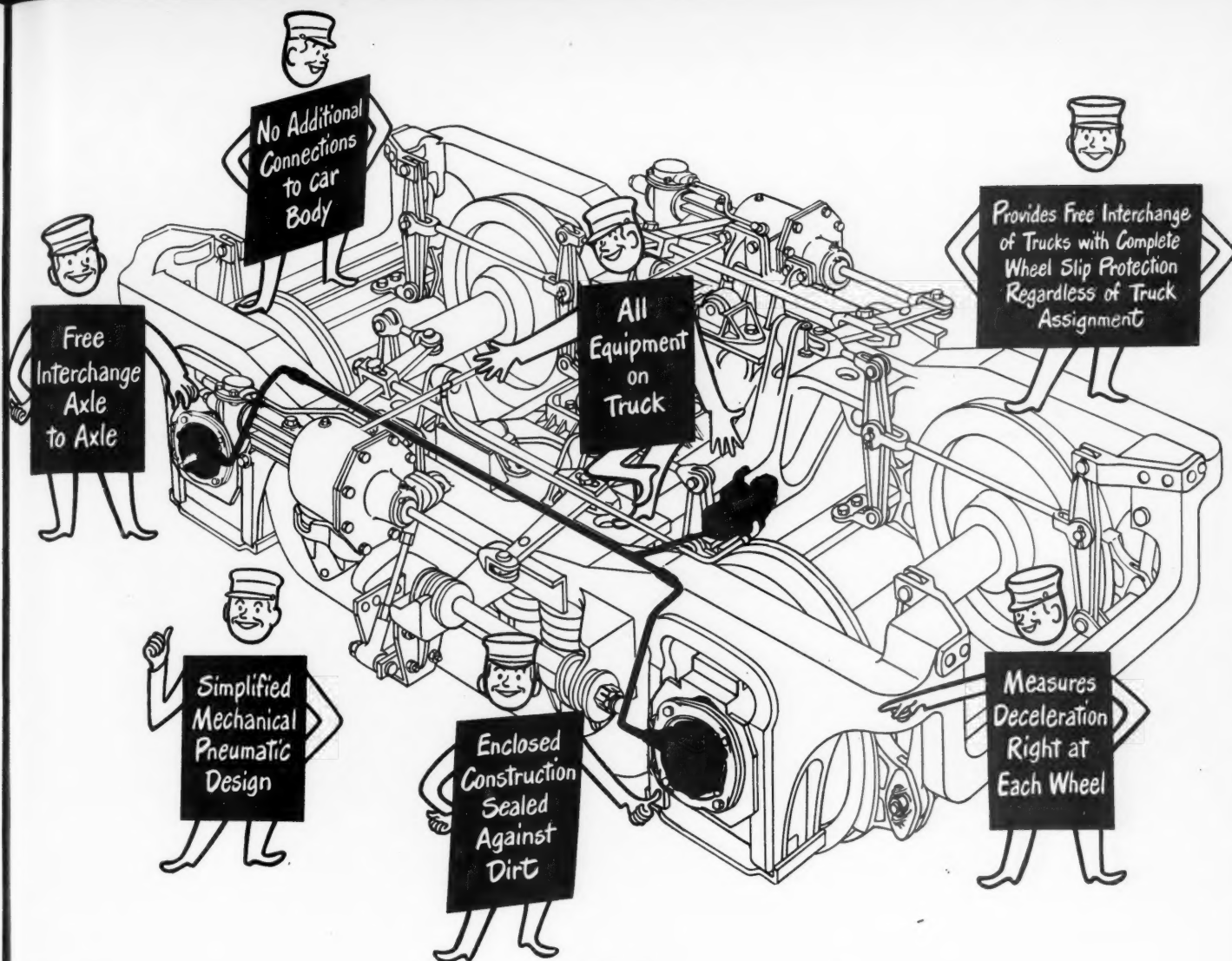
J. W. Graham Macdougall, solicitor for the Canadian National at Montreal, Que., has been appointed regional counsel for the Atlantic region, with headquarters at Moncton, N. B., succeeding **W. H. Jost**, who has resigned from the C.N.R., to become a partner in the law firm of Burchell, Smith, Jost, Meagher & Burchell, at Halifax, N. S.

Maurice A. Bliss, chief disbursement accountant of the Central Vermont, has been promoted to auditor of that road, with headquarters at St. Albans, Vt., succeeding **Donald M. Kerr**, whose ap-



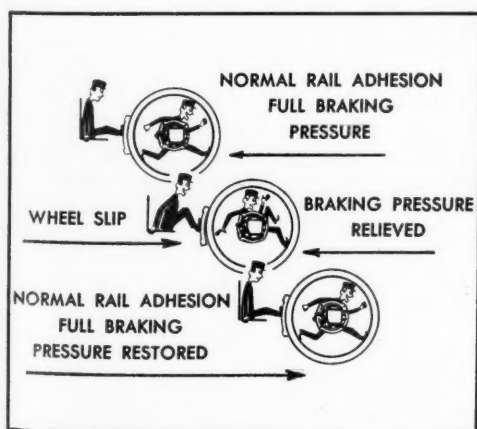
Maurice A. Bliss

pointment as auditor of the Grand Trunk Western at Detroit, Mich., was reported in the *Railway Age* of December 4. Mr. Bliss, a native of Georgia, Vt., attended grade schools in



the figures tell the story of **Westinghouse**

AP DECELOSTAT ADVANTAGES



Millions of miles of travel without sliding a wheel have been reported by railroads with Westinghouse AP Mechanical-Pneumatic Decelostat installations. The dollar value of this performance, in terms of reduced wear on equipment and maintenance of maximum braking efficiency under all rail conditions, makes it an impressive return on investment.

As all equipment is on the truck, and no additional connections to car body, free assignment of trucks is possible. Enclosed, dirt-sealed construction enhances integrity of operation. Simplified mechanical-pneumatic design acts positively—relieves brake pressure at the first hint of wheel slip.

Ask for Bulletin DL2461-1. It gives the complete story.



Westinghouse Air Brake Co.

WILMERDING, PA.



that town and is a graduate of St. Albans high school. He was been with the Central Vermont since July 1, 1917, when he entered service in the disbursement office. All of his service has been in the auditing department, with the exception of a period when he served as office assistant on budget matters in the general manager's office. Mr. Bliss has been chief disbursement accountant since February 1, 1943.

The Missouri-Kansas-Texas has announced the following changes in its accounting department: **J. T. Stephenson**, auditor at St. Louis, Mo., appointed general auditor, succeeding the late **William Brain**. **Elbert Clark**, assistant auditor and paymaster at Parsons, Kan., advanced to auditor at St. Louis; **F. A. Schulz**, assistant auditor of the M.-K.-T. of Texas at Dallas, Tex., appointed to succeed Mr. Clark; and **L. A. Scott**, chief clerk at Dallas, advanced to assistant auditor, succeeding Mr. Schulz.

OPERATING

Leon C. Albert, whose promotion to assistant general superintendent of the St. Louis Southwestern at Tyler, Tex., was reported in the *Railway Age* of October 30, was born on June 15, 1904, and entered the service of the Cotton Belt as a telegrapher in 1925. He served subsequently as train dispatcher and night chief dispatcher at



Leon C. Albert

Illmo, Mo., and Pine Bluff, Ark. During World War II Mr. Albert served as a captain in the Transportation Corps, returning to the Cotton Belt in 1946 as night chief dispatcher at Illmo. In April, 1947, he was advanced to assistant superintendent of rules and safety at Pine Bluff, which position he held at the time of his recent advancement.

C. E. Crippen, whose promotion to general superintendent of the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee, Wis., was reported in the *Railway Age* of November 6, was born at Austin, Minn., December 20, 1907, and was graduated by the University of

Minnesota in 1930. In the same year he entered the service of the Milwaukee, and served as instrumentman at several points until July, 1933, when he became special water inspector at Chicago. He was appointed division engineer at Savanna, Ill., in December, 1936, and assistant engineer, system, at Chicago, in November, 1937. In



C. E. Crippen

December, 1940, Mr. Crippen was named fuel inspector, and a year later became trainmaster at Minneapolis, Minn., whence he was transferred in May, 1942, to Milwaukee. From September, 1944, to February, 1946, he served in the armed forces. In March, 1946, he returned to the Milwaukee as assistant superintendent at Perry, Iowa, and in August was appointed chairman of the president's committee, at Chicago. He was further promoted in July, 1947, to superintendent of the Minneapolis-St. Paul Terminals division at Minneapolis, which post he held at the time of his current promotion.

J. E. Ballard, supervisor of perishable freight service of the Illinois Central at Chicago, has been advanced to superintendent of perishable freight service at that point, succeeding **J. D. Tuttle**, who has retired after 45 years of service with the railroad. Mr. Ballard is replaced by **J. A. Sutherland**.

W. R. McPherson, assistant superintendent of transportation of the Chicago, Milwaukee, St. Paul & Pacific's lines east of Mobridge, S. D., with headquarters at Chicago, has been appointed assistant to general superintendent of transportation, with the same headquarters. Mr. McPherson is succeeded by **Granger Smith**, chief passenger car distributor.

David A. Smith, whose appointment as superintendent of transportation of the Eastern region of the Canadian Pacific at Toronto, Ont., was announced in the *Railway Age* of November 6, entered the service of the Canadian Pacific in 1913 as an operator on the Lake Superior division. Mr. Smith spent the next 18 years as operator, agent or dis-

patcher at London, Ont., at the Toronto terminals and on the Bruce division. In 1931 he was named chief dispatcher at London, and six years later became transportation assistant at North Bay,



David A. Smith

Ont. He was appointed superintendent in 1940, serving first on the Trenton division at Toronto and then on the Schreiber and Sudbury divisions before becoming superintendent at Regina, Sask., in January of this year.

Joseph T. Osborne has been appointed to the newly-created position of superintendent of stations of the New York, Chicago & St. Louis, with headquarters at Cleveland, Ohio. Mr. Osborne has been associated with the Nickel Plate for 36 years, and since June, 1942, has been freight agent at Buffalo, N. Y.

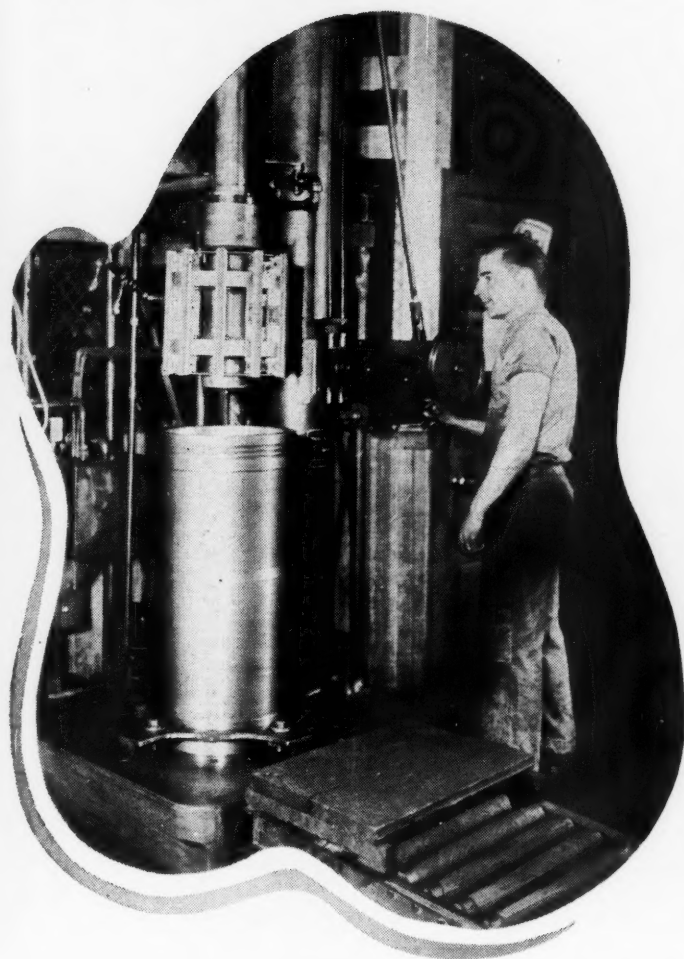
TRAFFIC

A. J. Mahon, assistant general agent of the Canadian Pacific at Vancouver, B. C., has been promoted to general passenger agent at Winnipeg, Man., succeeding **William Horder**, who has retired after 48 years of service with the C. P. Mr. Mahon is succeeded by **E. Officer**, special passenger representative at Calgary, Alta., who in turn is replaced by **H. Newton**, ticket agent at Moose Jaw, Sask. Mr. Newton will assume the new title of general agent.

Preston H. Taylor has been appointed assistant general freight agent of the Bessemer & Lake Erie at Pittsburgh, Pa.

Ross E. Chappell, whose promotion to assistant general passenger traffic manager of the Atchison, Topeka & Santa Fe at Chicago was reported in the *Railway Age* of November 6, was born on August 4, 1902, at Newkirk, Okla. He entered railway service with the Santa Fe in 1920 as a ticket clerk in his home town, and subsequently held various positions at Tulsa, Okla., and Oklahoma City. In 1938 he was appointed division passenger agent at Topeka, Kan., where he remained until

HSGI DIESEL LINERS



**To cut your
Diesel maintenance
costs . . .**

**WE INSTALLED THIS
MACHINE FOR YOU**

THIS marvel of precision tools is a hone which makes a super-smooth finish on the inside surfaces of HSGI Diesel cylinder liners. As it works for you—the user of Diesel liners—it proves that we mean to give the railroads a constantly improved product. For

to the well-known advantages of dense structure and greater heat resistance in Hunt-Spiller Gun Iron, it adds finer finish, quicker ring break-in, better lubrication, and extended cylinder life.

HSGI Diesel Liners are standard on some makes and available for all Diesel engines. They may also be had chromium plated or rough, for finishing in your shop.



HUNT-SPILLER MFG. CORPORATION

N. C. RAYMOND, President

E. J. FULLER, Vice-Pres. & Gen. Mgr.

383 Dorchester Ave. ★ South Boston 27, Mass.

Canadian Representatives: Joseph Robb & Co., Ltd., 4050 Namur St., Montreal 16, P. Q.

Export Agents:

International Rwy. Supply Co., 30 Church Street, New York 7, N. Y.

Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings

Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes

1941, when he was transferred to Denver, Colo. Mr. Chappell later served as assistant general passenger agent at Los Angeles, Cal., and in May, 1946, was promoted to general passenger



Ross E. Chappell

agent there. He was further advanced to passenger traffic manager at Topeka in February, 1947, which post he held at the time of his recent appointment.

Hugh N. Davis, whose promotion to passenger traffic manager of the Atchison, Topeka & Santa Fe at Topeka, Kan., was reported in the *Railway Age* of November 6, was born on February 27, 1898, at Newkirk, Okla. Mr. Davis began his career with the Santa Fe in 1918 as a freight cashier and ticket clerk in his home town. He later be-



Hugh N. Davis

came ticket clerk at Guthrie, Okla., and in 1927 he was appointed chief clerk at Oklahoma City, Okla. He was appointed traveling passenger agent in 1934, advancing to division passenger agent at Oklahoma City in 1937. Mr. Davis went to Topeka on February 1, 1947, as assistant general passenger agent, which position he held at the time of his recent promotion.

H. E. McNaught, district freight and passenger agent of the Southern Pacific at Fresno, Cal., has been appointed

manager of perishable freight traffic for the road's Pacific Lines, with headquarters at San Francisco, Cal.

MECHANICAL

W. R. Sugg, general supervisor of air brakes and lubrication of the Missouri Pacific at St. Louis, Mo., has been appointed acting mechanical superintendent, Western district, with headquarters remaining at St. Louis. He succeeds G. T. Callender, who has been granted a sick leave. Replacing Mr. Sugg is Don McIntyre. John Gann has been appointed air brake instructor at St. Louis and L. C. Bryson has been appointed acting assistant superintendent of safety—shops and enginehouses, with headquarters at Sedalia, Mo.

Charles P. Turner, Diesel service engineer with the American Locomotive Company at Schenectady, N. Y., has been appointed system supervisor Diesel operation and maintenance of the Lehigh Valley, with headquarters at Sayre, Pa.

ENGINEERING and SIGNALING

W. P. Conklin, division engineer of the Pennsylvania at Cleveland, Ohio, has been appointed division engineer, Chicago terminal division, succeeding the late W. R. Ganser, whose death was reported in the *Railway Age* of November 27. W. N. Myers, assistant division engineer, Philadelphia division, has been appointed division engineer at Indianapolis, Ind., succeeding J. P. Zearley.

William C. Howe, whose appointment as engineer bridges and buildings of the Bessemer & Lake Erie at Greenville, Pa., was reported in the *Railway Age* of December 4, was born on May



William C. Howe

24, 1908, at Juniata, Pa. Mr. Howe received a B.S. degree in civil engineering from Pennsylvania State College in 1930 and entered railroad service on May 17, 1937, as draftsman with the

B. & L. E. at Greenville. He served in that position until 1945, when he became designing engineer at Greenville, which position he held until his recent appointment as engineer bridges and buildings.

Herbert Henry Harman, whose retirement as engineer of track of the Bessemer & Lake Erie at Greenville, Pa., was reported in the *Railway Age* of December 4, was born on November 28, 1878, at Muncy, Pa. Mr. Harman was graduated in 1902 from Thiel College and attended Cornell University. He entered railroad service on June 6, 1901, with the B. & L. E. becoming draftsman at Greenville in 1903. He was appointed engineer of bridges in 1906, which position he held until 1931, when he became engineer of track.

PURCHASES and STORES

Fred A. Leeker has been appointed assistant purchasing agent of the Florida East Coast at New York.

SPECIAL

E. M. "Bert" Claypool, assistant in public relations for the Illinois Central at Chicago, has resigned after 15 years' service in that post. His future plans are expected to be announced shortly after the first of the year.

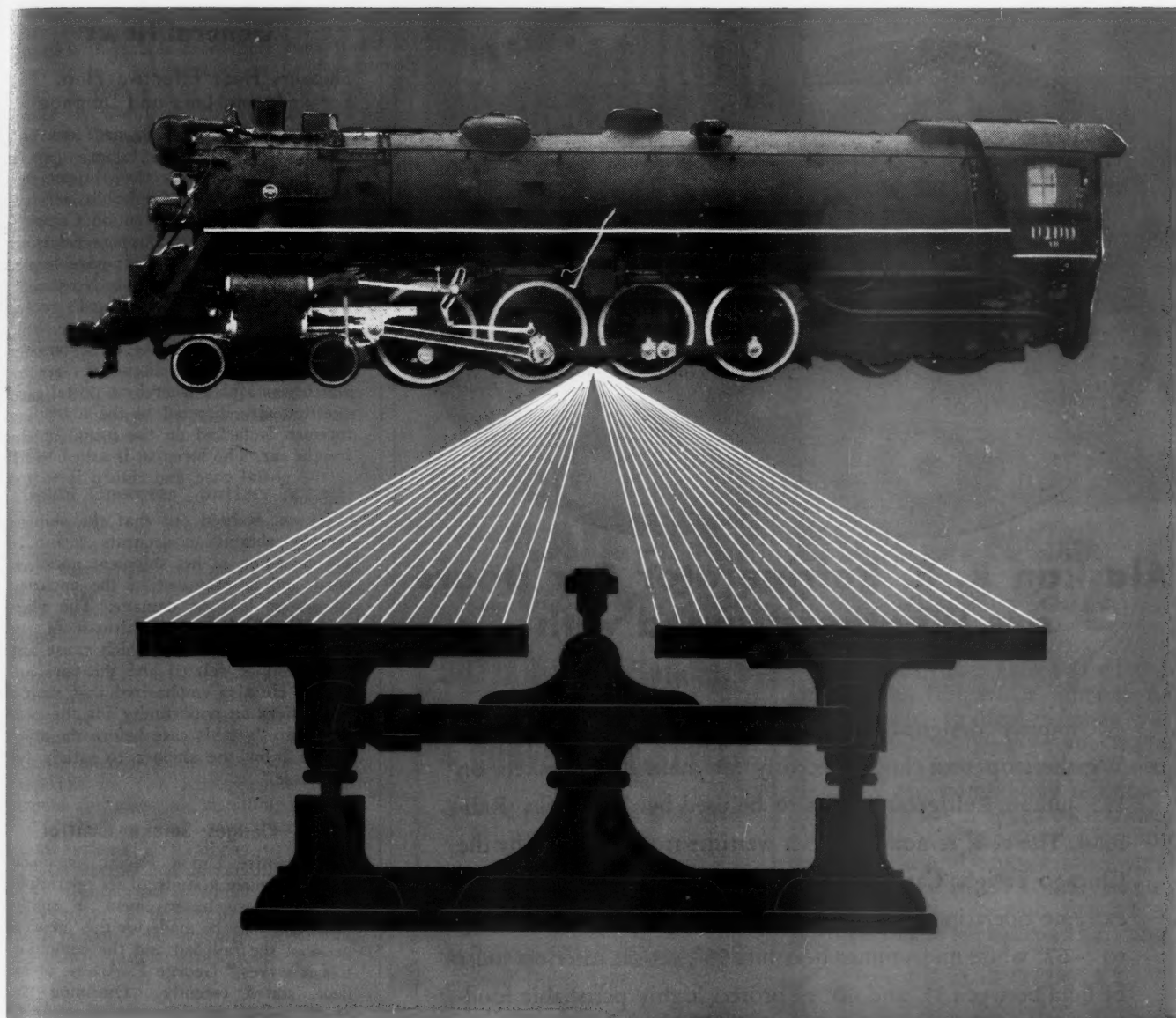
OBITUARY

Lon N. DeWeese, industrial commissioner of the Chesapeake & Ohio at Detroit, Mich., whose death was reported in the *Railway Age* of November 27, started his railroad career in 1917 as clerk and secretary to president of the New York, Chicago & St. Louis at Cleveland, Ohio. He served subsequently as freight traffic representative at New York, and in 1929 he joined the Pere Marquette (now part of the C. & O.) as industrial agent at Grand Rapids, Mich. Mr. DeWeese was transferred to Detroit in 1931 and was advanced to assistant industrial commissioner at that point in 1935. He had served as industrial commissioner since February 1, 1947.

W. F. Murray, who retired in 1946 as general traffic manager of the St. Louis Southwestern, died on December 1, at St. Joseph's hospital in Fort Worth, Tex. Mr. Murray, who was 67 years old, started his career with the Cotton Belt as a record clerk at Tyler, Tex., in 1901, and advanced to general traffic manager in 1933.

E. V. Neville, auditor of claims of the Canadian Pacific at Montreal, Que., died on November 27.

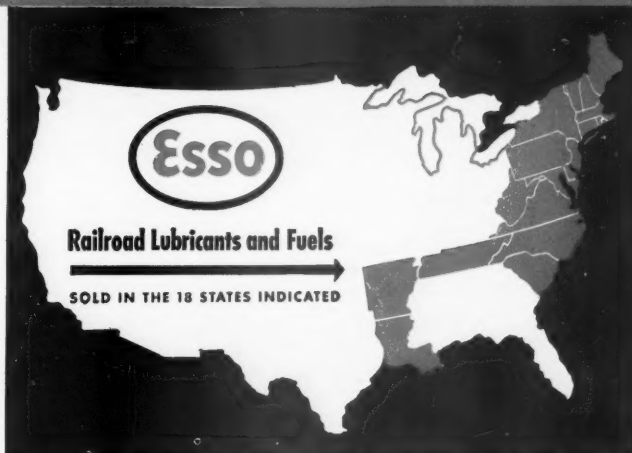
Dr. V. H. Horning, who retired in 1944 as assistant chief surgeon of the Chicago & North Western at Chicago, died in that city on December 3.



Ever weigh a Locomotive on Laboratory Scales?...

Laboratory scales can't weigh a 150-ton locomotive ...but they do a lot better by constantly weighing and keeping tabs on the many Esso Railroad Products that speed trains along the nation's highways of steel.

Developed in America's largest petroleum laboratories ...proved by accurate performance-records kept in thousands of "labs on wheels" over millions of rail-miles — Esso Fuels and Lubricants today meet every petroleum problem of the railroads!



ESSO STANDARD OIL COMPANY

Boston, Mass.—New York, N. Y.—Elizabeth, N. J.—Baltimore, Md.
Richmond, Va.—Charleston, W. Va.—Charlotte, N. C.
Columbia, S. C.—Memphis, Tenn.—Little Rock, Ark.—New Orleans, La.
ESSO STANDARD OIL COMPANY OF PENNSYLVANIA
Philadelphia, Pa.

The Sign of **QUALITY**



The Symbol of **SERVICE**

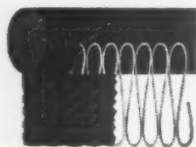


Alaskan R. R. Refrigerator Car Doors are Weatherstripped with **BRIDGEPORT INNER-SEAL**

Uniquely designed and ruggedly constructed*, Inner-seal Weatherstrip was chosen recently for main door gaskets on 125 Jumbo Refrigerator Cars to be used by the Alaska Railroad. The cars, remodeled from wartime troop sleepers by the Chicago Freight Car and Parts Co., will be subjected to most extreme operating conditions. Winter temperatures often drop to -67° while midsummer heat hits 95° , yet car interiors must be held between 35° and 40° to protect highly perishable food-stuffs being shipped from Canada and the U. S.

That Inner-seal will meet this test has been proved through experience. On special refrigerator cars subject to temperatures of -110°F where evaporation losses had been 30% and higher, Inner-seal gaskets sealed so perfectly that losses dropped to less than 3%.

Write today for data sheet giving complete details on sizes, shapes and materials.



*A live sponge rubber bead molded for life onto a flange woven of rust-resistant, tough spring wire and strong cotton thread. Bead and flange are neoprene-coated to resist the ravages of sunlight, oils and abrasives.

Bridgeport
FABRICS, INC.
BRIDGEPORT 1, CONN.
Est. 1937

General News

Shippers Hear Effective Plan For Reducing Loss and Damage

An important step toward loss and damage prevention is taken when a consignee reports to the shipper the condition in which the goods arrived, the Freight Claim Prevention Committee of the Mid-West Shippers Advisory Board points out in a four-page report issued to its members late in November. The report, based on the board's recent quarterly meeting, at Fort Wayne, Ind., states that the practices of a number of shippers were discussed, among which was a plan whereby a postal card questionnaire directed to the unloading foremen is tacked on the inside of the freight car. The foreman is asked to fill in the postal card and return it to the shipper.

It was pointed out that the shipper thereby obtains an accurate report of the condition of his shipment upon arrival and a statement of the apparent causes of loss or damage. The plan, said C. R. Purcell, chairman of the committee, is one "by which cause and effect can be related and the cure applied." He also emphasized that such a plan offers an opportunity for the consignee to "get his case before the shipper and for the shipper to satisfy his customer."

Ashby Pledges Smoke Control

The entire Union Pacific organization will make a study of its operations to see where improvement in smoke reduction may be made for the "general good of the railroad and the communities it serves," George F. Ashby, president, stated recently. Outlining the road's smoke abatement policy during a conference with H. H. Ulrich, chief smoke regulation engineer for Omaha, Neb., Mr. Ashby said: "The future of railroads lies in being progressive and cooperating with the various movements designed to promote better living and clean and progressive cities with high standards . . . Maximum utilization of our resources and the adoption of the best technological methods must become the rule for all railroads. Railroad executives must think in terms of greatest economy and usefulness in all of their operations."

October Employment

Railroad employment decreased 0.41 per cent — from 1,350,421 to 1,344,873 — during the one-month period, from mid-September to mid-October, and the mid-October total was 0.87 per cent below that of October, 1947, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-39 average, was 127.5 for October, as compared with 129.2 for September and 128.6 for October, 1947.

October employment was above that

of October, 1947 in only three categories, the increases ranging from 0.44 per cent in maintenance of equipment and stores to 1.94 per cent in the executives, officials and staff assistants group. Decreases ranged from 0.86 per cent in the professional, clerical and general group to 4.83 per cent in transportation, other than train, engine and yard.

As compared with September, October employment increased in four categories, the increases ranging from 0.05 per cent in transportation (train and engine service) to 0.19 per cent in transportation, other than train, engine and yard. Decreases ranged from 0.01 per cent in maintenance of equipment and stores to 2.06 per cent in maintenance of way and structures.

Gould Operates "Battery School"

A series of practical "schools" to teach better techniques of storage battery maintenance and repair to foremen, supervisors and engineers in industries using lead-acid batteries for motive power, or standby or direct current supply, has been inaugurated at Trenton, N. J., by the Gould Storage Battery Corporation.

Future five-day schools will be conducted, according to M. W. Heinritz, Gould vice-president, for classes interested in (1) battery-powered lift trucks and materials, handling systems; (2) telephone and other communications systems; (3) railway car lighting, Diesel starting and air conditioning, and (4) transportation signal work. The next school, to be held in about 90 days, will probably be organized specifically to help industrial truck users.

Milwaukee Road Installs Better Facilities for Customer Service

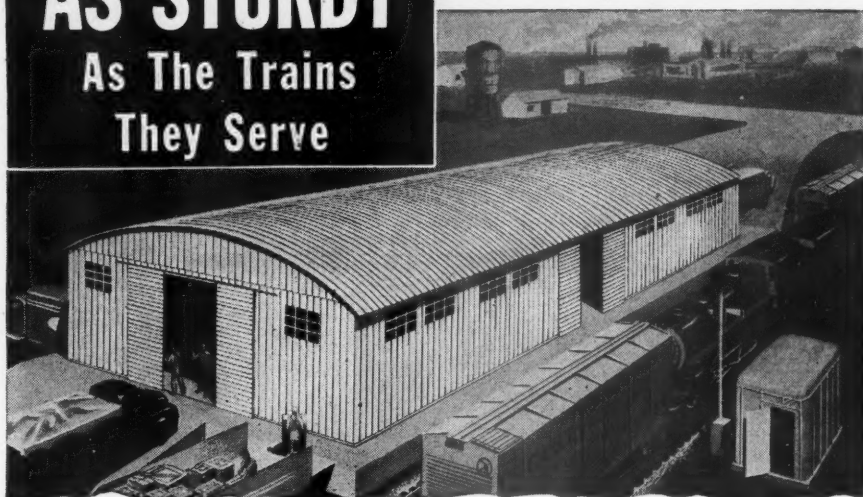
A remodeled ticket office, featuring added facilities for more efficient service to patrons, was opened in Minneapolis, Minn., last month by the Chicago, Milwaukee, St. Paul & Pacific. It includes, among other things, a telephone-order desk where customers may pick up rail and Pullman tickets previously ordered.

The road has also opened a reservation bureau at its Minneapolis passenger station for advance assignment of sleeping and parlor car space. The new bureau, which is detached from the depot ticket office, is intended to expedite the handling of reservations and information requests made by direct-line telephone. Reservations may be made as far as six months in advance, the road states.

Tennessee Intrastate Rates

Because the Railroad and Public Utilities Commission of Tennessee issued an October 29 order authorizing Tennessee roads to establish on November 10 intrastate freight-rate increases in line with the Ex Parte 162 interstate advance, the Interstate Commerce Com-

AS STURDY As The Trains They Serve



RAILWAY BUILDINGS *Quickly Erected at Low Cost!*

BUTLER Steel Buildings Are Fabricated in 4 CONVENIENT STYLES

- ★ Rigid Frame, Truss Clear Steel-Aluminum Buildings
- ★ Bowstring Truss Construction Steel-Aluminum Buildings
- ★ Packaged Steel Buildings—Small Utility Type
- ★ Boulevard Buildings—Key-Lock Steel Panel Construction

MANY TERMINAL & YARD USES

Freighthouses • Engine Houses
• Machine Shops • Warehouses •
Machine and Parts Shelters •
Repair Houses • Track Car and
Tool Houses • Scale Houses
• Control Stations • Other Special-
ized Railroad Uses.

In size, they range from 6 ft. to 60 ft. width, almost any length. In design, they vary considerably—give you a wide choice for your exact needs. All are completely adaptable. There are 2 types of construction—bolt-together aluminum sheets and sturdy steel structurals and key-lock panels. Each has special, proved advantages for railroad buildings.

FREE BOOKLET

Illustrates and describes Butler Steel Buildings for railroad uses. See how easily you can adapt them. See how much you save in time and costs. Mail coupon today.

BUTLER STEEL BUILDINGS

BUTLER MANUFACTURING COMPANY

Factories: Kansas City, Mo. Galesburg, Ill. Richmond, Calif. Minneapolis, Minn.



For Prompt Reply, Address: 7334 E. 13th St., Kansas City 3, Mo.
934 6th Ave., S. E., Minneapolis 14, Minn.
Dept. X P. O. Box 1072, Richmond, Calif.

Please send FREE Illustrated Booklet On "BUTLER BUILT Steel Buildings for Railroad Uses."

Firm Name _____

Address _____

City _____ Zone _____ State _____

CLARK

MATERIAL HANDLING *News*

a **BIGGER**
exhibit
of **BETTER**
machines

TO DO MORE WORK
AT LOWER COST

*—the Third
National
Materials
Handling
Exposition*

The 1949 Exposition will be held in Philadelphia January 10 through 14 and will constitute a broad view and preview of "industrial history in the making." It will be the most convincing demonstration of all time that the Science of Materials Handling is eternally new—that it is a never-ending process of evolving new and better methods and equipment to the end that our National economy can shake off the shackles of old, inefficient and time-consuming practices which have become prohibitively costly both in human energy and in dollars.

CLARK ELECTRIC AND GAS POWERED
FORK TRUCKS
AND INDUSTRIAL TOWING TRACTORS



INDUSTRIAL TRUCK DIV., CLARK EQUIPMENT COMPANY BATTLE CREEK 24, MICH.
REPRESENTATIVES IN PRINCIPAL CITIES THROUGHOUT THE WORLD
AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATEGIC LOCATIONS

mission vacated its October 11 order which would have required such an adjustment on November 20. While thus granting in part a motion of the Tennessee commission, the I.C.C. at the same time refused to go along on the motion's full request for dismissal of "all proceedings" in the case — No. 29800.

In the latter connection, the I.C.C., recalled that the report accompanying its now-vacated October 11 order had referred to the railroads' motion that the proceeding be kept open for further hearing on the matter of applying also the Ex Parte 166 increases to the Tennessee rates. The report went on to express the I.C.C.'s view that the railroads should first ask the Tennessee commission to authorize the Ex Parte 166 increases; but it added that "when reasonable opportunity has been given for consideration of that request, if cause is shown, we will give immediate consideration to a request for further hearing." The suggested petition has been filed, and the Tennessee commission has assigned it for hearing December 13.

C. & N. W. Fined \$1,000

The Interstate Commerce Commission has been advised that the Chicago & North Western and Armour & Co. each entered a plea of nolo contendere in the federal district court at Davenport, Ia., on November 3 to an information charging them with granting and receiving concessions in violation of the Elkins Act. Each of the defendants was fined \$1,000. The commission's notice said the case involved free and exclusive use by Armour of the C. & N. W.'s stockyard facilities at DeWitt, Ia.

Report Says Accident Inquiry Disclosed "Lax" Supervision

Reporting on its investigation of a head-end collision between two Pennsylvania yard locomotives with cars, the Interstate Commerce Commission said that the inquiry disclosed "deviations from prescribed practices" which "establish the fact that necessary supervision by responsible operating officers has been lax and inadequate." The disclosed conditions "demand immediate correction," the report added, having previously asserted that "under the method of operation in effect in this [manual-block] territory, safety depends upon strict adherence to the requirements of the rules."

The investigation was conducted under the supervision of Commissioner Patterson, and the report's formal finding was that the accident was caused by "admitting an opposing train to an occupied manual block under clear-block authority."

The collision resulted in the death of two employees and the injury of three. It occurred near Pleasant Gap, Pa., on that part of the P. R. R.'s Williamsport division extending from the division post, near Bellefonte, Pa., to Montandon, 66.8 mi. of single-track line over

which trains are operated by timetable, train orders and a manual-block system. The point of accident was on the main track within yard limits—0.69 mi. west of Pleasant Gap and 2.81 mi. east of Bellefonte—on an 8 deg. 39 min. curve where the track is laid in a hillside cut and the view each crew had was restricted to 200 ft.

The yard limits extend from Milesburg, (3.15 mi. west of Division Post and thus on the Middle division) to White, a distance of 6.55 mi. In this territory there are two blocks, one of which extends from Milesburg, an open station, to Font, a block-limit station, 2.85 mi., and the other from Font to White, a block-limit station, 3.7 mi. Font and White are, respectively, 2.61 mi. west and 1.09 mi. east of the point where the collision occurred. The block-limit stations at Font and White are controlled in turn by operators in charge of the open-block stations at Milesburg and Montandon. Among the applicable operating rules is one providing that, within yard limits, movements not authorized by timetable or train order may be made on the main track by "permission of the operator without protecting against extra trains or engines."

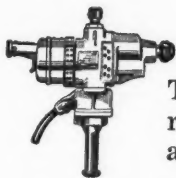
The locomotives involved were yard engine 1422 moving eastward with three cars and a caboose at an estimated speed of 5 m.p.h.; and yard engine 1742 with its front end coupled to a cut consisting of a caboose and nine cars, which it was pulling westward at an estimated speed of 15 m.p.h. The speed limit on the curve involved was 20 m.p.h. Engine 1742, the caboose and first car of that movement and engine 1422 were derailed in the collision. This caboose was "demolished" and the other derailed car was "badly damaged," as were both engines and their tenders. The other caboose was "slightly damaged." The employees killed were the conductor and a brakeman of engine 1742; the three injured were the fireman and a brakeman of that same engine and the firemen of engine 1422. The weather was clear at the time of the accident, which occurred at 4:25 p. m.

The operations which preceded it had got under way at 1:22 p. m. when the operator at Milesburg granted block authority to the crew of engine 1742 to proceed from Font to White and return to Font. At 2:41 p. m., however, the conductor of engine 1742 reported to the operator at Milesburg that his engine was into clear at White to perform switching service on an auxiliary track. The Milesburg operator then annulled the clear-block authority for the return movement of that engine from White to Font.

The commission's report noted that the original grant of authority for engine 1742 to move from White to Font had not been entered on the Milesburg block record. One of the operating rules requires that "a block record must be maintained for each block station and block-limit station." The block record at Montandon was found with the

HOW Graybar can simplify your purchases and stores

OF MANY ELECTRICAL ITEMS



Through its network of warehouses near railroad centers, Graybar makes available to you — conveniently and quickly — quality electrical products of over 200 leading manufacturers. Because our nearest warehouse normally can deliver many of these items to you on short notice, your stores of such items can safely be kept at a minimum — saving space (and hence money).



The services of a Graybar Railroad Specialist — and Specialists in wiring, lighting, power apparatus, inside and outside electrical construction — are available without charge to our customers. Widely experienced, these men can help you plan and carry out your electrical projects efficiently and economically.



The best way to see how these Graybar services can benefit you is to give our nearest office your next "electrical" order. *Graybar Electric Company, Inc.* Executive offices: *Graybar Building, New York 17, N. Y.*

4867



OFFICES AND WAREHOUSES IN OVER 100 PRINCIPAL CITIES

100,000 ELECTRICAL ITEMS ARE DISTRIBUTED

THROUGHOUT THE NATION

...VIA
Graybar



SOUTHERN PINE LUMBER COMPANY

CAR DECKING • CAR SIDING • CAR ROOFING • CAR FRAMING • CAR LINING
CROSSING PLANK • TIMBERS • GENERAL MAINTENANCE LUMBER

SALES OFFICE: TEXARKANA U.S.A.

MILLS: DIBOLL AND PINELAND, TEXAS

"proper entry" for the original grant of authority to engine 1742 as well as for the annulment of the return-trip authority, the latter having been timed there at 2:45 p. m.

About 3:00 p. m., the crew of engine 1422 was instructed to move three cars from Bellefonte to Oak Hall, about 6 mi. east of the yard-limit sign at White. Because no member of this crew was qualified to operate the engine east of White, a pilot was assigned to the movement. The pilot had not previously operated an engine over this portion of the road, but he had qualified as an engineer and had operated over the line as a fireman.

About 3:35 p. m., when engine 1422 was about 3,200 ft. west of the block-limit station at Font, its conductor obtained authority from the operator at Milesburg to proceed from Font to White. The conductor told the operator to record the engine's departure from Font at 3:40 p. m. The operator did so and transmitted the information to the operator at Montandon, who made a like record.

A train order was required for that portion of this engine's proposed movement which was beyond yard limits, i.e., the 6 mi. between White and Oak Hall. To obtain the order, the conductor communicated with the operator at Montandon, who was in charge of the block-limit station at White. This request was made at about 3:50 p. m., when the engine had still not reached Font, although the Milesburg and Montandon records showed that it had departed from that point at 3:40 p. m.

The Montandon operator thought that the request for the train order had been telephoned from White; and, when he obtained the order from the dispatcher, he had it addressed to engine 1422 "at White via Montandon." The conductor experienced some difficulty in receiving the order, and before the order was completed the pilot took over the telephone; but the operator was not aware, when the order was being repeated, that he was not talking to the conductor.

The order was made complete at 4:10 p. m., but the copy in possession of the engine crew was addressed to them "at Font; Opr: White via Montandon." During the repetition of the order the operator did not observe the difference in the addresses. And when the persons who received the order said "to mark the movement by" at 4:12 p. m., the operator proceeded on the basis of his understanding that the engine was at White, recording it as having passed that point at 4:12 p. m. Actually, the engine left Bellefonte, which is 586 ft. west of Font, at that time.

Here the commission noted that the pilot did not request a clearance card for authority to enter the block east of White without stopping at that block-limit station for further block authority. This was in violation of a rule which provides that a signalman may give a train verbal authority to enter only one block; and that a clearance card, au-

**METAL FABRICATOR
CUTS COSTS 67 PER CENT
—CAN YOU?**



**Get these facts to your key men
and see how much you can save**

- **WITH ARC WELDING**, a fabricator cut costs on one large metal part by 67%.
- **WITH ARC WELDING**, a truck builder slashed production on dump trailer bodies to an unprecedented 15 hours.

In your plant, too, savings like these in time and money are possible—when your key personnel *know* the up-to-the-minute facts on arc welding—*know* how to put them to work on your problems. And it's so easy to get the facts to them *now*—at no cost to you!

FREE to business management

Examine the General Electric *Electric Arc Welding Manual* free of charge. It covers every phase of arc welding from a list of welding services for the user to specific examples of production feats in plants like yours. It provides *up-to-date* data about available equipment, power supply requirements, design and safety measures. It's written by experts, *without sales bias*, in a language your men can easily understand. Look through it. Satisfy yourself that it will pay off in your plant, then—

Get a FREE showing of the film

Your key personnel will enjoy learning the newest facts on arc welding in this modern, absorbing, *visual* way. Here's a thirty-minute General Electric sound film in full color that wallows across its ideas—*actually shows* you precisely how arc welding is building better products cheaper in plants like yours. It's prepared by arc-welding specialists in terms that are grasped readily. Show it to your key men and—

Get FREE review booklets

They're ideal for individual study and review. Have as many as you like, but—

ACT NOW! Don't delay. Remember—today's arc welding offers you unprecedented opportunities to cut costs, improve quality, lick difficult production problems. So start the ball rolling by filling in the coupon below, and we'll rush you a copy of the G-E *Electric Arc Welding Manual*. Do it now!

Attach
to your
business
letterhead

**FREE
TO BUSINESS
MANAGEMENT**

General Electric Co.
Section H684-9
Schenectady 5, N. Y.

Please mail me a sample copy of the G-E *Arc Welding Manual* without cost or obligation, with details on how I can arrange for a **FREE SHOWING** of the film. (Extra copies at regular manual price—\$1.25.)

Name _____ Title _____

Company _____

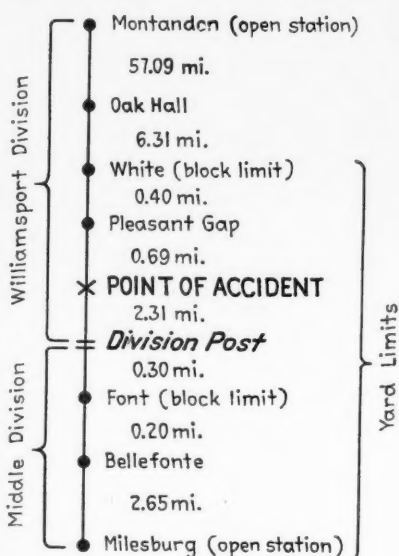
Street _____

City _____

GENERAL ELECTRIC

thorized by the superintendent, must be obtained when a movement is to be admitted to more than one block.

About 4:17 p. m., the conductor of engine 1742 asked the operator at Montandon for new block authority to make his return trip from White to Font; and this operator checked with the operator at Milesburg. The latter cited the record indicating that engine 1422 had occupied that block at 3:40 p. m., and said he had no record that this engine had cleared the block at White. The Montandon operator then cited his record indicating that engine 1422 had reported clear at White at 4:12 p. m.; and the operator at Milesburg granted clear-block authority from White to Font for engine 1742, which departed westward from White at 4:20 p. m. As noted above, the collision occurred five minutes later.



Locations involved in the accident

In summing up, the commission said its investigation disclosed that it had been the "practice" in this territory to permit movements under oral authority to pass two block-limit stations, despite the rules requiring a clearance card for such movements. Another "practice" referred to was that of blocking round trips with the result that the movements "are not reported clear at the various block-limit stations, and the required entries in the station records as to the arriving and departing times are only approximations."

"The employees concerned," the report added, "did not have a definite and common understanding as to the identity and the occupation of the employee communicating with them by telephone, the exact location of the movements at the time block authority was granted and the time of clearing of the blocks involved, nor was proper entry of the required information made on the station records. The improper handling of the block authorities in this instance resulted in the misunderstanding concerning the block authority granted to engine 1742 to enter a block occupied by an opposing movement."



MODEL A
For Automatic Transition

"DIESELOMETER"

TRADE MARK

Writes the Story of Diesel-Electric Locomotive Operation

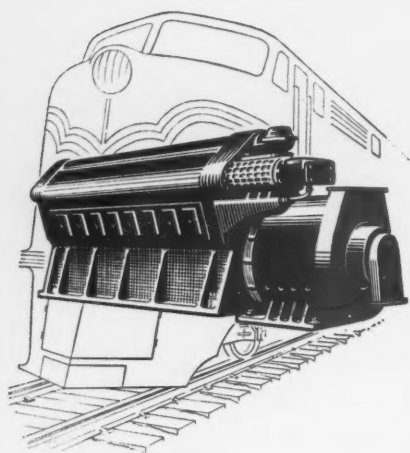
VALVE PILOT DIESEL LOCOMOTIVE OPERATION RECORDERS provide a graphic, permanent record in black and white of every run. They eliminate guesswork by furnishing a means for checking tonnage ratings and schedules. Tapes easily read by enginemen and supervisors alike, are a constant guide to better locomotive performance.

See what Valve Pilot Locomotive Recorder Equipment can do for you. Full information is yours for the asking.

Patents
Pending

VALVE PILOT CORPORATION

230 Park Avenue, New York 17, N. Y.



dieselization

Diesel engines in railroad locomotives are piling up an enviable trouble-free performance record. Many castings in these engines contain specified Molybdenum contents.

When wear or heat must be resisted, and high strengths are required, the use of Molybdenum in cast iron is becoming more and more routine.

The listing of a cylinder liner for Diesel use in railroad locomotives containing 3.20% Carbon, 1.90% Silicon, 0.85% Manganese, with 0.20% Chromium, 0.40% Molybdenum and 0.45% Nickel added can be found on page 10 of our new booklet—"Applications of Molybdenum Cast Irons."

Dozens of other alloy cast iron compositions used in Diesel engines, as well as hundreds of other Molybdenum-containing compositions are similarly listed in this new booklet. Write for it!

Climax Molybdenum Company

500 Fifth Avenue
New York City

Please send your FREE BOOKLET
"Applications of
Molybdenum Cast Irons"



Name

Company **MOLY**

Address

RA-11

F9

Current Publications

ARTICLES IN PERIODICALS

Rivalry Between the New York Central and the Erie Canal, by David Maldwyn Ellis, 32 pages. Reprinted from *New York History*, July, 1948. Reprints available from Mr. Ellis, 1446 Elm st., Utica, N. Y.

An interesting account of the losing battle fought against the iron horse for well over a half century by canal boat operators and their allies—contractors, New York mercantile interests, and Buffalo forwarders. The article is well-documented.

Kate Shelley at the Bridge, Coronet, November, 1948. Published by *Esquire, Inc.*, 919 N. Michigan avenue, Chicago 11. Price, 25 cents.

This is the retold story of how a 15-year-old Iowa girl, Kate Shelley, prevented a Chicago & North Western train from plunging over a washed-out bridge into a rain-swollen stream 67 years ago. Her deed received worldwide attention, and she later became the subject of essays, poems, ballads and dramatic readings.

BOOKS

I'm a Railroad Man, compiled and edited by Leon R. Harris. Published by Leon R. Harris, Box 285, Moline, Ill. Price \$1.50.

Dedicated to American negro railway employees, this book of railroad songs contains the words and music to the well-known "John Henry" and five other railroad songs—"I'm a Railroad Man," "Railroad Love Song," "Pick an' Shovel," "Cap'n, Cap'n," and "Railroad Boomer." The words to two other songs—"Tamp 'em Up Solid" and "Trav'lin," are given, but the music is not included.

Aluminum Alloys and Mill Products Data Book. 166 pages, illustrations. Published by the Reynolds Metals Company, 2500 S. Third st., Louisville, Ky.

This book contains 163 tables of data on alloys, tempers, sizes, shapes, physical properties and fabricating characteristics, plus 33 pages of explanatory text covering the alloy designation system, temper designation system, heat-treatable and non-heat-treatable alloys, casting alloys, casting methods, and foundry practice. The tables are arranged in groups for ready reference.

China's National Railways, by H. J. von Lochow. 162 pages, maps. Published by the author at the University Press, National Peking University, 50, Kuo Hwei Chieh, Peiping, China.

Its purpose being the study of existing railways and the possibility or necessity of further expansion, this book

discusses China's railway system up to the revolution of 1911; its development from then until the inauguration in 1928 of the Chinese National Government in Nanking; the Ministry of Railways, 1928-1937, the Japanese railway administration, 1937-1945, and the return of the railways to the authority of the Chinese National Railways. It also covers railway workshops, rolling stock and financial liabilities, and the railway of Manchuria.

Practical Handbook of Industrial Traffic Management, by Richard C. Colton. 384 pages, illustrations. Published by Funk & Wagnalls Company, 153 E. 24 st., New York 10, N. Y., in association with *Modern Industry Magazine*. Price, \$6.

A practical overall picture of the art of shipping materials economically, the basic purpose of this book is to give the student, business man and the practicing traffic man a better understanding of the broad scope of industrial traffic management, what it can be expected to contribute to a business, and suggestions as to how these contributions may be accomplished. It covers such subjects as freight rates, bills of lading, how to buy transportation intelligently and economically, freight claims, expediting without always using the highest rated transportation service, passenger traffic from a "traveling-on-company-business" viewpoint, packing and loading, distribution and warehousing, organizing and equipping an industrial traffic department, and railroad siding, demurrage and weight agreements.

Main Line; Fifty Years of Railroad with the Southern Pacific, by Ernest L. King as told to Robert E. Mahaffay. 271 pages. Published by Doubleday & Co., Garden City, N. Y. Price, \$3.

When Mr. King went to work for the Southern Pacific in the 1890s he was night telegrapher at a whistle stop; when he retired in 1945 he was assistant to the vice-president in charge of operations. During the intervening years Mr. King had many and varied experiences. "Main Line" is the story of those experiences, and also contains interesting and amusing stories about other people on the S.P. There is the story of how the Wells Fargo Company found itself unwittingly involved in the white slave trade; the chapter on E. H. Harriman and how everyone jumped when he came over the road or called meetings; the chapter on the brotherhoods and the institution of "featherbed" rules and the part Mr. King played in settling some of the disputes; the description of the training school which he started during World War I; and the chapter on famous wrecks, to mention only a few. Anyone interested in railroads, whether as a fan or as a railroader, will enjoy reading this book.